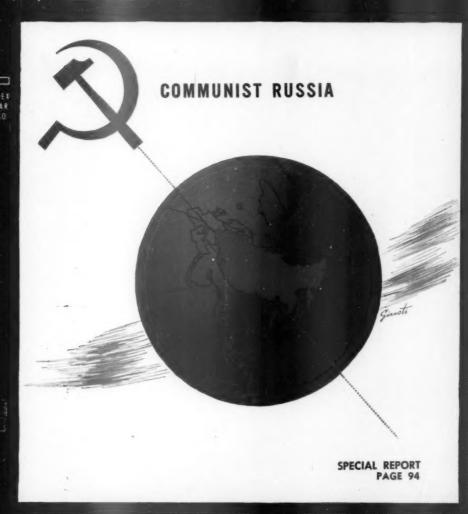
BUSINESS WEEK



A McGRAW-HILL PUBLICATION

DEC. 20, 1952

60 -

TWENTY FIVE CENTS

quality steel is more than pride at JESSOP

Steelmaking is a fine art in the Jessop mill. For example, the high alloy steel which went into the tool bits pictured above was produced in a small batch with the greatest of care. Each ingredient was weighed out meticulously. The formula was exactly prescribed according to the specific function of the end product and the melting took place under precise time and temperature control. Extreme quality control is more than a matter of pride-of-accomplishment with Jessop men. They want more customers and they want them to be satisfied. They want Jessop to be known as the absolute leader in the making of special steels. They work hard at it, every day.

HIGH SPEED STEELS - HIGH SPEED BITS - PRECISION GROUND FLAT STOCK
HIGH SPEED AND ALLOY SAW STEELS - HOT WORK DIE STEELS - COLD
WORK DIE STEELS - CARBON AND ALLOY STEELS - STAINLESS AND HEAT
RESISTING STEELS - VALVE STEELS - STAINLESS-CLAD STEELS - CAST-TOSHAPE STEELS - COMPOSITE TOOL STEELS - ARMOR PLATE

E\$35(0) P

STEEL COMPANY . WASHINGTON, PENNSYLVANIA

A whole Company of Marines said THANKS

How a group of telephone women helped to make it a Merry Christmas for the men in Korea

Helping others to have a Merry Christmas is a tradition among telephone people. In recent years there has been an increasing number of gifts for those in the service.

One group of telephone women observed last Christmas by sending a holiday package to every man in Company E of the 1st Marines in Korea. They adopted this company in remembrance of Corporal Richard E. deVilliers, a gallant fellow-worker



Members of the TEVS, the Telephone Employees Volunteer Service in San Francisco, holding the scroll of thanks from the Marines. It is one of their proudest possessions.



Santa's suit was made by a South Korean who had never seen or heard of Santa Claus.

South Koreans also took turns in drawing the jeep trailer.

who was killed in action while serving with Company E.

You can imagine what happened when all those packages arrived.

The boys made quite an occasion of it. There was much scurrying around to get a Santa Claus suit. None was available but finally they found a South Korean who could sew and the job was completed after a lot of picture drawing and explaining. Then Santa was mounted on a jeep trailer and drawn along in state.

After the packages were opened, a scroll of appreciation was signed by

every member of the company and sent back to this country. More than two hundred of the men wrote letters of thanks.

"Your kindness," wrote their Captain, "brought happiness to the hearts of a group of Marines, many of whom were spending their first Christmas away from home."

It all turned out so well that it was decided to do the same thing again this year. So hundreds of packages are again on their way across the seas to help make it a Merry Christmas in Korea.

THIS IS JUST ONE OF MANY WAYS in which telephone people in many communities say "Merry Christmas."

Whether it's dressing dolls for orphaned children, or contributing trees and turkeys and baskets of food, telephone men and women are spurred by the desire to be helpful. Through all the year they try to keep good will and The Voice With The Smile in telephone service.

BELL TELEPHONE SYSTEM



Electrical Reporter
Stays on the
Tough Jobs Added Evidence that

VEEDER-ROOT

Compact and rugged . . . this electrically operated reset counter is specially designed for tough jobs that demand longer counter life.

Here's another instance of the infinite applicability of Veeder-Root Countrol—electrical, mechanical or manual. And here's another instance, too, of the endless resourcefulness of Veeder-Root engineering, and the ability to design a complete

counting package that fits the job fully and exactly. Now . . . what's your problem?

VEEDER-ROOT INCORPORATED

"The Name That Counts"

Chicago 6, Ill. • New York 19, N.Y. • Greaville, S.C. Montreal 2, Canada • Dundee, Scotland Offices and Agents in Principal Cities



EDITOR & PUBLISHER Elliott V. Bell MANAGING EDITOR Edgar A. Grunwald EXECUTIVE EDITOR Kenneth Kramer

ASSISTANT MANAGING EDITOR Robert B. Colborn ASSOCIATE MANAGING EDITOR John L. Cobbs ASSOCIATE MANAGING EDITOR Peter French

DEPARTMENTS

DEPARIMENTS

DEPARIMENTS

DEPARIMENTS

DEPARIMENTS

DEPARIMENTS

DEPARIMENTS

DEPARIMENTS

Finance: William McKee Gillingham, Editor; William B. Franklin

Finance: William McKee Gillingham, Editor; J. P. Chamberlain

Foreign: Howard Whidden, Editor; Paul R. Miller, Jr., George F. King, Jr.

Industrial Production: Charles M. Garver, Editor; John K. Fockler, George J. Gray, Jr.

Labor: Merlyn S. Pitzele, Editor; Edward T. Townsend, Stanley H. Brown

Management: Richard L. Waddell, Editor

Marketing: Carl Rieser, Editor; Cora Carree

Personal Business: Frank J. Fogarty, Editor

Regions: Richard M. Machol, Editor

Regions: Richard M. Machol, Editor

Illustration: Harry Jensen, Kate McSweeney, Editors; Richard A. Wolters (Pictures-Photography),

Mary Flaherry, Robert Isear, Jacquelyn Lang, Arthur Richter, Beatrice Wixted

Statistics: Gertrude Charloff

Library: Dorothy Roantere, Librarian; Emily Cherry, Ruth Callanan

Library: Dorothy Roantree, Librarian; Emily Cherry, Ruth Callanan

NEWS EDITORS

Marilyn T. Benjamin, T. B. Crane, Robert F. Deed, Maxwell D. Gunther, Irene Pearson, Guy Shipler, Jr., Doris I. White

EDITORIAL ASSISTANTS

David B. Carlson, D. A. Drennen, Jean Drummond, Alice Marks, Mary Maguire, Dorothea Schmidt

ECONOMICS STAFF

Dexter M. Keezer, Director; Stahrl Edmunds, Richard Everett, Howard C. Gary, Douglas Greenwald, Beryl M. Hegarty, Roger F. Miller, Robert P. Ulin

DOMESTIC NEWS SERVICE

Boston Bureau: John Hartshorne, Manager
Chicago Bureau: James M. Sutherland, Manager; Mary B. Stephenson, Dorothy Miller
Cleveland Bureau: Robert E. Cochran, Manager; Jean H. Henderson
Detroit Bureau: Stanley H. Brams, Manager; James C. Jones, Jr., Glenna Sotier McWhirter
Houston Bureau: Eugene Miller, Manager
Los Angeles Bureau: Thomas M. Self, Manager
Pittsburgh Bureau: Richard N. Larkin, Manager
San Francisco Bureau: Richard Lamb, Manager; Joanne O'Brien
San Francisco Bureau: Richard Lamb, Manager; Glen Bayless, Carter Field, Ja

Washington Bureau: George B. Bryant, Jr., Manager; Glen Bayless, Carter Field, Jay Flocken, Boyd France, Joseph Gambatese, Sam Justice, William H. Kearns, John L. Kent, Donald O. Loomis, Edward McLain, Jesse Mock, Gladys Montgomery, Arthur L. Moore, Morton A. Reichek, Caroline Robertson, Vincent Smith, W. B. Whichard, Jr.

Robertson, Vincent Smith, W. B. Whitnard, Jr.
Correspondents: Akron, Albany, Albuquerque, Altoona, Asheville, Atlanta, Austin, Baltimore, Birmingham, Bloomington, Bridgeport, Buffalo, Charleston, Charlotte, Cincinnati, Columbus, Concord, Dallas, Denver, Des Moines, Duluth, Endicote, Escanaba, Fort Lauderdale, Fort Worth, Green Bay, Greensboro, Harlingen, Harrisburg, Hartford, Houston, Indianapolis, Jackson, Jackson-ville, Kansas City, Knoxville, Lakeland, Little Rock, Louisville, Madison, Memphis, Miwaukee, Minneapolis, Nashville, New Orleans, Norfolk, Oklahoma City, Omaha, Orono, Peorra, Philadelphia, Portland, O're.), Providence, Richmond, Rochester, Salt Lake City, San Antonio, San Diego, Seattle, St. Louis, Syracuse, Toledo, Topeka, Tulsa, Urbana, Wichita, Wilmington, Worcester, Honolbile. Seattle, S Honolulu

FOREIGN NEWS SERVICE

Editor: Joseph K. Van Denburg, Jr. Frankfurt: Gerald W. Schroder London: Nathaniel McKitterick Manila: Herbert Leopold

Mexico City: John Wilhelm Paris: Ross Hazeltine Rio de Janeiro: Lionel Holmes Tokyo: Alpheus W. Jessup

Manila: Herbert Leopold
Correspondents: Amsterdam, Athens, Bangkok, Beirut, Belgarade, Bogota, Bombay, Brussels, Buenos
Aires, Cairo, Caracas, Ciudad Trujillo, Copenhagen, Djakarta, Durban, Geneva, Guatemala City,
Havana, Helsinki, Istanbul, Johannesburg, Karachi, La Paz, Lima, Madrid, Melbourne, Oslo,
Ottawa, Panama City, Quito, Reykjavik, Rome, Salzburg, San Juan, San Salvador, Santiago,
Sao Paulo, Stockholm, Sydney, Tehran, Tel Aviv, Wellington, Winnipeg.

ADVERTISING & BUSINESS MANAGER Herman C. Sturm

BUSINESS WEEK . DEC. 20 . NUMBER 1216

ed on subscription orders.
copies 25c. Subscription rates — Unitepossessions 36.00 s year; \$12.00 fo
possessions 36.00 s year; \$14.00 fo
r. Chands 37.00 s year; \$14.00 fo
r. Salo of the second results of the second resecond class matter Dec. 4, 1936, s
second class matter Dec. 4, 1936, s
became Act of
Dec. at Albany, N. T. under Act of



James Solomon Russell School, Brunswich County, Va. Cost-\$524,870. Heating Contrac-tors: W. I. Bloomfield & Son. Inc., Farmville, Va.

Nature Controls the Heat in these Schools

Dixon & Norman, Virginia architectural firm specializing in schools, specify Webster Moderator Systems for efficient heat in open-plan buildings fed by long steam lines.

"Nature makes the weather, let her operate the controls"- so say Dixon & Norman, Richmond architects and engineers. "Many of our schools are used for community activities. Classrooms are large, with auditoriums, gymnasiums and shop areas often in separate wings. Despite long steam lines there is balanced heat distribution. The Moderator System delivers heat evenly and rapidly to every section of a building.



bove: John J. Wright Consolidated School, potsylvania County, Va. Cost — \$635,000 leating Contractors: W. J. Bloomfield & Son, ac., Farmville, Va.

Below: Montevideo High School, Montevideo, Va. Cost - \$622,740. Heating Contractors: J. H. Cothran Co., Inc., Altavista, Va. For information about Webster

Products for school heating, call the Webster Representative or write us.

Address Dept. BW-12 WARREN WEBSTER & CO. Camden 5, N.J. Representatives in Principal Cities In Canada, Darling Brothers, Limited, Montreal



Here's how BENDIX assists in PRODUCT

These unmatched facilities are yours to command

Manufacturers and engineers faced with the dual problem of the need for continuous improvement in products and manufacturing techniques, and the high cost and scarcity of proper research facilities and engineering talent, are invited to bring their problems to Bendix. By so doing they will immediately add to their developmental programs a combination of resources unduplicated in American industry.

Experience—The reason lies in the special nature of the Bendix contribution to industrial progress. While Bendix builds some items for direct distribution, it is largely devoted to building the basics of better products for other manufacturers. These products number into the hundreds and range from low-cost, mass production items to highly complex devices utilizing the very latest discoveries of modern science. As a result, Bendix



14 RESEARCH LABORATORIES to speed development of any product

has explored virtually every avenue of product development and has constructed a staff and facilities wholly unique in acope and versatility. This experience and these resources are at the command of Bendix customers.

Specifically, here is what this means to

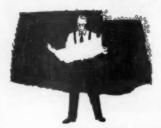
Specifically, here is what this means to you in your efforts to improve your competitive position by bettering present products, by creating a new line, or by savings in manufacturing costs.



HUNDREDS OF PRODUCTS applicable to every industry

Products—The answer to your problem may be as simple as the selection of a present Bendix product, or of an adaptation engineered to your need. This is particularly likely if you are engaged in any of the major industries—for Bendix builds scores of products for each; for example: some 48 for the automotive industry—over 130 for aviation—a total of 60 or more useful to the petroleum industry—and many electronic instruments and devices which are adaptable to virtually every industry.

Engineering—Or perhaps you need a wider range of engineering talent. Bendix customers can dip into a pool of 4000 engineers including specialists in such widely useful sciences as electronics, hydraulics, chemistry, magnetics, pneumatics,



4000 Engineers to aid research, design, production

meteorology, fuel combustion, instrumentation, metallury and nuclear energy.

Because of the unparalleled diversity of Bendix activities this staff also includes experts in all types of design and production problems. Whatever your business or need you can, through Bendix, bring to bear a multiplicity of minds trained to deal with your particular need.

Research—If lack of adequate research facilities is holding up your development program, Bendix can offer stellar aid again. There are 14 research laboratories in the various Bendix divisions constantly dealing with the practical application of the special skills of the division to all manner of problems. These



A COMPLETE RESEARCH DIVISION to explore advanced scientific fields

divisional laboratories may already be solving a problem similar to yours. If not, they are available to Bendix customers to solve any problems in their individual spheres of interest.

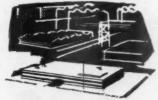
For basic research in the newer fields of electronics and physics, Bendix has established a separate division—the Bendix Aviation Corporation Research Laboratories. The staff of this division not only originates projects which will be of future benefit to Bendix customers, but is available upon call to assist and advise any Bendix division or its customers. Some of the fields currently being explored by the Research Division are analog and digital computers, hydraulic and electrical servomechanisms, radiation instrumentation, mass spectroscopy, and nuclear energy.



PRINCIPAL DIVISIONS I BERRIX EANGE auto, railroad, mobile, aviation radio; radar. BERD ESSARCA LABBRATORIES. ECLIPSE MACHINE: Stramberg® carburetors; electric fuel pumps; starter drives; coaster brake instruments. EED TARK dynamotors; (investers; special vocuum tubes. PACIFIC telemotoring; hydraudic and electric aviation and small engine magnetas; diesel fuel injection; electrical connectors. BERBIX ECLIPSE OF CAMADA, LT



00



23 MANUFACTURING DIVISIONS for increased production facilities

Manufacturing—If your needs can be solved by additional manufacturing facilities, Bendix is an ideal answer. The 23 Bendix divisions devoted to manufacturing have met and mastered every type of production problem from a fast, volume program to the highest precision standards in industry. These plants are already serving the greatest names in American industry—and have met every requirement for price, precision and speed.

This is necessarily only a highlight view of the broad creative engineering facilities at your command for product development. As a guide to these facilities Bendix has prepared a 40-page book, "Bendix and Your Business." Send for a copy and find out how Bendix can speed, simplify and reduce the cost of your product development.



Executives, Engineers—For a copy of this valuable book, place write on your company letterhead to Bendix Aviation Corporation, 1100 Fisher Building, Detroit 2, Michigan.

Engineering Stadents—Sand for the facts about the wmany fine careers open to you at Bendix plants and research conters. Write to Bendix Aviation Corporation, 1104 Fisher Building, Detroit 2, Michigan.



THE NAME MILLIONS TRUST

PROPETS: automative brakes; power sheering; carburetons; aviation brakes; lending gear; feel metering. DEADY ARRENGE MARSHALL ECLIFSE: brake blocks; brake lining. ECLIPSE PROBEES: aviation instruments and accessories; foundry. FRIEZ: weather ectuators; depth recorders. ZENTER* CARDURETON: heavy duty and small engine corburetors. SENTER PROFEES: filters. SCHITTELA MARKES — Windsor, Owarie. DEBUX INTERNATIONAL —72 Fifth Ave., New York 11, N. Y. Cable "Bendialni" New York.



Rubber "RIDE" tames bucking chairs

A massive, metal spring governed the tilting mechanism of old fashioned swivel chairs. This mechanism had a dangerous tendency to fly apart, suddenly...dumping chair and chair occupant, violently, upon the floor! Annoyance, discomfort and, in some cases, painful injury resulted. In addition, frequent, bothersome lubrication was necessary to silence the inevitable swivel chair squeak.

The Bassick Company, manufacturers of controls for swivel-type office chairs, brought these problems to the attention of Firestone Techni-Service engineers. Working together, these two companies developed the fool-proof Flo-tilt swivel chair control unit.

Swivel chairs utilizing this Flo-tilt unit "ride" and tilt on tough, long-lasting special Firestone rubber encased in a steel sleeve. Tilting action is controlled by the natural resiliency of this compressed Firestone rubber. All metal springs are eliminated...hence this smooth functioning mechanism cannot collapse, cannot squeak, never needs lubrication. Millions of chairs in use have proven that this Bassick Flo-tilt unit far excels all other swivel chair controls!

the

did

tool

like

And

Mu

Have you a problem? Do you need a compound to cushion, protect, wrap, or waterproof? Would increased resistance to abrasion, oil, heat, acid or steam help make your product better? Would elimination of vibration, noise or shock benefit your business? If so, we suggest you write and let our Techni-Service engineers help solve your problem. In many cases, with a stock part; in others with a specially designed unit. Write Firestone, Dept. 10A, Akron, Ohio.

Firestone Techni-Service pays off again

Enjoy the Voice of Firestone, Monday evenings on NBC Radio and Television



"I'LL WALK HOME FOR CHRISTMAS!"

"Even three months ago I wouldn't have believed it. When it happened and they pulled me out from under that truck — and they got a look at that leg — it didn't look like I'd ever walk again.

"And later on, when I came to, I lay there thinking: What would happen to my job? Where could I get work if I couldn't walk... and how about Helen and the children? Would they have to push me around in a wheelchair for the rest of my life?

"But I hadn't counted on the team that went to work for me. First, they took me to the hospital. Treated me like a big-shot with the best of care. And when I got better, to the Liberty Mutual Rehabilitation Center in Boston... to make my crushed leg useful again.

"Those folks really get results! Bit

by bit they straightened out my leg. I learned to wiggle my toes again. They're giving me simple exercises and work to strengthen the muscles and, soon, I'll walk by myself on crutches.

"Yes, I'll walk home for Christmas—under my own steam! Merry Christmas? I've started mine—"



We work to keep you safe

Rehabilitation of seriously injured employees is just one part of Liberty Mutual's complete Humanics Program, which brings together all activities for preventing accidents and reducing disability and cost when accidents occur. It includes a wealth of specialized advice in Industrial Engineering and Hygiene, unsurpassed Medical

Claims Service, Preventive Medicine and Rehabilitation — all directed toward reducing loss in every form, including the cost of Workmen's Com-

pensation Insurance.

To find how Humanics can help you reduce rosts and improve produc-

you reduce costs and improve production in your plant, just call or write for the booklet "Humanics". Look in your Telephone Directory for the Liberty Mutual office nearest you; or write 175 Berkeley St., Boston 17, Mass.







ELECTRICAL AND ELECTRONIC WIRES AND CABLES

For the Automotive, Appliance, Motor, Radio, and Television Industries Belden Manufacturing Company Chicago 80, Illinois

READERS REPORT

Primarily for Pleasure

Dear Sir:

I regret the omission of the Willys station wagon from your otherwise excellent article, "Quiet Newcomer: the All-Purpose Utility Car" [BW—Nov. 22'52,p64]. . . . You may wish to quibble that the Jeep station wagon is neither full-sized nor passenger carrying. Actually, it is bigger on the inside, if slightly smaller on the outside than most of its contemporaries. . . .

HAROLD WOOSTER

ALLISON PARK, PA.

Dear Sir:

In your issue of Nov. 22, 1952 (page 64), you report in the heading of Transportation the growth of the use of the all-purpose utility car.

In designating the market for this very usable body style, the manufacturer and your article fail to note the munici-

pal market....
We have long been looking for a multipurpose vehicle which could serve as transportation for supervisory personnel and fill in for emergencies, including the transportation of tools, equipment, supplies, and personnel....

As an experiment this year we have purchased three Ford Ranch Wagons (see below) for police patrol duty, with three-way radio equipment and provided with emergency ambulance facilities....



WM. J. DEEGAN, JR.

CITY MANAGER QUINCY, MASS.

 We purposely excluded the many specially designed passenger and commercial combinations because the emphasis in our article is on a new styling of body that pretends to be strictly a pleasure car yet, without destroying this illusion, can double for a cargo transporter.

Medicine a Free Enterprise

Dear Sir

Congratulations for publishing "Making More Medicine Cheaper for More

After 20 years, the same U.S. Rubber Expansion Joints still protect this condenser

e

n

er i-

nls, ...

ce

mm-

ng

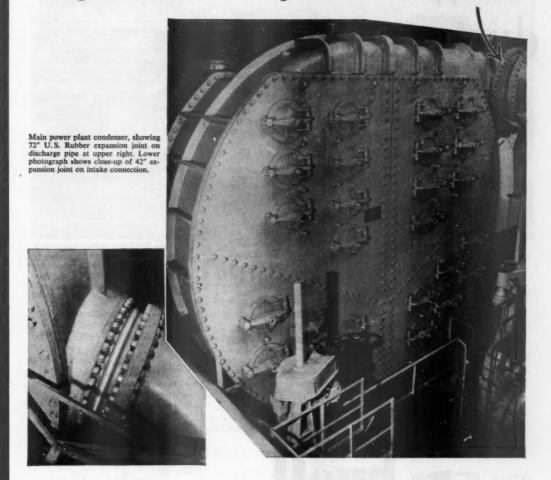
nis

ns-

ak-

ore

952



That's a long time in any industry. This southeastern power plant still gets perfect service from these U.S. Expansion Joints. Pipes are protected from expansion and contraction and the effects of vibration. It's easy to see why this plant, like so many others throughout the nation, uses "U.S." Expansion Joints exclusively. Let U.S. Rubber engineers help you handle your expansion joint problems.



UNITED STATES RUBBER COMPANY
MECHANICAL GOODS DIVISION • ROCKEFELLER CENTER, NEW YORK 20, N. Y.

Ask your Plant Engineer ...

Why dust recovery is a profitable investment

Nineteen years ago, our engineers developed what we think is the most workable way of solving the Dust Recovery problem. It was the formation of "dust recovery teams", consisting of Buell engineers and the plant engineer—the man who knows his particular dust problem better than anyone else.

This team, drawing on the experience and background of Buell, coupled with the plant engineer's intimate knowledge of his own problem, brings about the kind of results industry has been seeking: substantial profit increase, greater plant yield, improved product and/or process, better employee morale.

To learn more about Buell's 3 basic systems of Dust Collection, Buell's Team-Up with the Plant Engineer, and how they can work for you-send for the new informative booklet

entitled, The Collection and Recovery of Industrial Dusts. Buell Engineering Co., Dept. 30-L, 70 Pine Street, New York 5, N. Y.





ENGINEERED EFFICIENCY IN DUST RECOVERY







'SP' ELECTRIC



RECIPITATOR-CYCLON



COLLECTOR



DUST HOPPER VALVES

People" [BW—Nov.22'52,p194], which was a much needed roundup of the health insurance picture.

Your description of the "semi-private" plan of Group Health Insurance, Inc., was excellent, but we should like to comment on one point . . . the article says that the plan's comprehensive service for a flat premium, regardless of income, rankles many doctors because they figure people who can pay more, ought to.

As it works out in actual practice, the people who can pay more usually do, because . . . those who can afford private accommodations usually ask for them; in such instances, the physician is free to charge the patient an additional fee, beyond the amount paid by GHI.

ARTHUR H. HARLOW, JR. PRESIDENT GROUP HEALTH INSURANCE, INC.

Done Cir.

NEW YORK, N. Y.

Will it be possible to get reprints of your article in the issue of Nov. 22, "Making More Medicine Cheaper for More People"?

. . . You have passed very lightly, with one appearance of the word "preventive," over what many feel to be perhaps the most significant contribution of plans like HIP (Health Insurance Plan, Inc.), not only to community and national health, but very directly to employers also. HIP can demonstrate conclusively that its preventive care does prevent loss of man-hours on the job, and that it reduces need for hospital care very substantially in comparison to Blue Cross members who are not HIP members.

Mrs. Robert L. Smith executive secretary group health council, inc. new haven, conn.

 Our story was designed to give the businessman a look at what health insurance costs today in terms of dollars and cents without discussing the relative merits or implications of the health plans available on the market.

Stimulating New Blood

Dear Sir:

In your issue of Nov. 22, 1952, on page 156, you mention that General Electric Co. in Syracuse has started a "new gimmick" in offering an employee a \$5 bonus for each new man that he brings in... For a period of more than two and a half years, we have continuously rewarded our employees with a \$25 bonus for each new employee they obtained....

obtained. . . . As for "new gimmicks," we believe that we have one. We have a quarterly plan where for each three-month period,

BUSINESS WEEK . Dec. 20, 1952



What happens when bank customers mutiny?

Calming a line squall takes more than tact — it takes a system. New York's Seamen's Bank for Savings found that system in McBee Keysort.

Formerly a clerk had to fill in amount, number and payee's name on each teller's check or money order, then again on a tally. It took 5 minutes.

Today, with McBee Keysort checks and money orders, it takes less than a minute for Seamen's special check writing machine to print date, amount and signature on the Keysort form. The teller need merely fill in the payee's name (carbon-copied on customer's receipt and unit register) and detach the unit register for filing.

When checks and money orders return to the

bank they no longer have to be handsorted for reconciliation. The bank sorts them en masse (easy with Keysort), compares each with the unit register, then deletes the unit register. Reconciliation takes one-tenth the time it used to.

Basis of the Keysort system is a marginally punched card. When notched, the precoded holes along the edges of these cards yield a wealth of data . . . easy to classify, summarize, file, find and use.

With present personnel, without costly installations, Keysort cards and machines provide management controls at less cost than any other system.

Ask your McBee man for a frank estimate of McBee's advantages to your business. Or write us.



THE McBEE COMPANY

Sole Manufacturer of Keysort— The Marginally Punched Card 295 Madison Ave., New York 17.



Offices in principal cities.
The McBee Company, Lamited,
11 Bermondsey Road, Toronto 13



How to find an 800% production increase in a piece of pipe

low caw sawe manpower and money in countless ways when you tap the idea resources of power brushing. For example:

It took 18 seconds to clean the threads of the 21/2 x 1/4-inch set screws shown above. Time was cut to 2 seconds with Osborn Power Brushing by devising the simple pipe fixture shown. The operator feeds the screws in one end of the pipe and an Osborn brush makes contact with the work at a slot cut in the pipe, spinning and cleaning the threads uniformly. A little stationary wire brush, inserted as shown through the pipe, controls rotation and traverse of the work.

Have your Osborn Brushing Analyst help you develop and apply output-increasing ideas to your cleaning and finishing operations. Call now or write The Osborn Manufacturing Company, Dept. 884, 5401 Hamilton Avenue, Cleveland 14, Ohio.



LOOK FOR THE NAME OSBORN . . . RECOGNIZED EVERYWHERE FOR QUALITY WORKMANSHIP AND MATERIALS

the name of each employee who donates blood during that period is put into a hat. One name is selected, and the lucky winner receives a \$100 War Bond. We feel that this plan has been instrumental in upping blood donor participation. . . .

JOHN A. FRINK

PRESIDENT MECHANEERS, INC. BRIDGEPORT, CONN.

Forging Ahead

Dear Sir:

Your article, "Learning to Work Titanium," [BW-Nov.1'52,p48] . . . gives a good, lucid review of some of the problems that have been dealt with and are still confronting industry in the application of this new metal with a minimum of technicalities.

In the section on forging, the implication is made that only one company has been forging this material. The facts are that several companies have done varying amounts of work in this field. While we recognize and respect the technical competence of the company mentioned, we would like to point out that the Steel Improvement & Forge Co. has been in the forefront of this development, having successfully forged a large number of different pieces in titanium. We first produced titanium compressor blade forgings in April of 1949, and to the best of our knowledge that was the first time that such a product had been made in this material.

H. A. ZIMMERMAN

THE STEEL IMPROVEMENT & FORGE CO. CLEVELAND, OHIO

· We did not mean to imply that Wyman-Gordon Co. is the only company that has been forging titanium. We merely used the company as an il-

Eating Our Words

Dear Sir:

On page 124 of the Aug. 23, 1952, issue, if I have located the correct hole, there was an item in which I was much interested. I cut it out, but unfortunately my daughter seems to have eaten it. The subject matter had to do with a new method of shipping live lobsters, which, since she is very intelligent, is probably why she ate it.

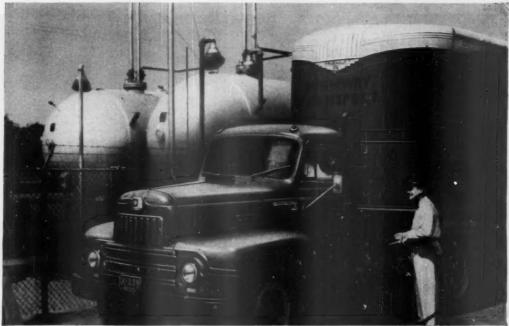
I wonder if you would do me the great favor of sending this clipping, or providing the name of the developer so

that I might contact him.

My daughter and I both enjoy Busi-NESS WEEK very much, though perhaps for different reasons. My only complaint is that it doesn't come often enough. . . . BARRIE WHITE, JR.

BUSINESS WEEK . Dec. 20, 1952

ANCHORAGE, ALASKA



International LP-Roadliner with famous Super Red Diamond Engine available in four- and sixwheel models. 42,000 to 65,000 lbs. GCW. Also available with gasoline and diesel engines.

INTERNATIONAL ROADLINERS

-with factory-installed LPG fuel system!

New International "LP" four- and six-wheel Roadliners now offer the famous Super Red Diamond valve-in-head engine designed to take full advantage of the extra power and economy inherent in LP gas.

Exhaustive laboratory and field tests demonstrate these remarkable extra operating advantages provided by the new International "LPG" units:

Greater engine efficiency with low-cost fuel-Super Red Diamond Engine compression ratios have been increased-an engineering advancement made possible by the high octane ratings of LP gas. The resulting greater engine efficiency represents an important factor in operating economy.

Longer engine life with less maintenance-International's new-type manifolding and its special mixing and regulator valves increase the clean-burning quality of LP gas. Deposits on valves are almost entirely eliminated. Engine wear and cylinder erosion

are reduced and there is less contamination of lubricating oil. Many fleet operators report exceptionally high, trouble-free mileage on their International "LPG" trucks. One owner, whose name is available on request, has driven an International Roadliner more than 240,000 miles without removing either the cylinder head or the pan.

Along with improved engine economy and efficiency, these new International "LPG" trucks offer you the same stamina that has made International first in heavy-duty sales for 21 straight vears. Ask your International dealer or branch about this latest International contribution to low-cost hauling.



INTERNATIONAL HARVESTER COMPANY - CHICAGO



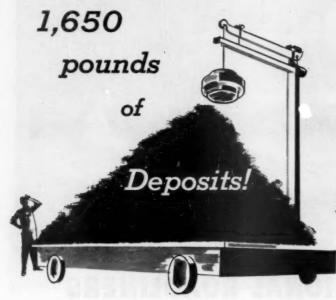
International Harvester Builds McCormick Farm Equipment and Farmall Tractors . . . Motor Trucks . . . Industrial Power Refrigerators and Freezers Better roads mean a better America

INTERNATIONAL TELESTRATE T



Dowell Service

used chemicals to remove





The boiler tube section above was cut from a tube after the boiler was turbined. Section below is from the same tube after the boiler was further cleaned by Dowell Service.



from a boiler
previously
cleaned by
turbining

Dowell was recently called upon to clean a 150,000 pphr. boiler. In a few hours, 1,650 lb. of deposits were removed even though the boiler had been previously cleaned by turbining!

If you have a cleaning job to be done on boilers or heat exchange equipment, look to Dowell Service. Special liquid solvents are applied according to the technique demanded by the job—filling, spraying, jetting, cascading or vaporizing. Dowell furnishes all necessary trained personnel, chemicals, pump trucks and controls. No scaffolding or dismantling is necessary—costly downtime is held to a minimum.

Dowell engineers have experience in all kinds of cleaning problems. And Dowell equipment is designed to help them do the best possible job.

Free Bulletin on Industrial Cleaning!

Call or send for complete information and estimates on Dowell Industrial Cleaning. Write Dpt. 506A in Tulsa, or call your nearest Dowell office. No obligation, of course.

Dowell Service

Over 90 Offices to Serve You with Maintenance Cleaning for:

Boilers • Condensers • Heat Exchangers • Cooling Systems
Pipe Lines • Piping Systems • Gas Washers • Process Towers
Process Equipment • Evaporators • Filter Beds • Tanks
Chemical Services for Oil, Gas and Water Wells

DOWELL INCORPORATED Tulsa 1, Oklahoma





TO EXPAND QUICKLY, BOEING SPECIFIES

LONG-SPAN MULTIPLE BUILDINGS

FOR ECONOMICAL QUALITY CONSTRUCTION

When stepped-up production at Boeing created an immediate need for additional space, it was logical for this leading aircraft manufacturer to look to all-steel, non-combustible Long-Span Multiple buildings.

The large, clear-span bays are ideal for manufacturing and storage . . . economically insulated, ventilated, and

skylighted . . . easily expanded.

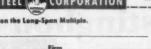
Long-Span Multiples provide up to 18-foot interior clearance under struts. Sliding, overhead or other types of doors may be installed. Bays are 40 x 351/2 feet, providing ample room for modern industrial equipment, palletization, and production lines. Dome height of arched roof runs up to 28 feet. Ribs and trusses are of low alloy N-A-X HIGH-TENSILE steel for strength, durability and economy.

Manufacturers in a hurry can count on prompt delivery of Long-Span Multiples. All parts are factory fabricated, pre-punched for connections, packaged and shipped ready for erection. Write for complete information.

GREAT LAKES STEEL CORPORATION

NATIONAL STEEL



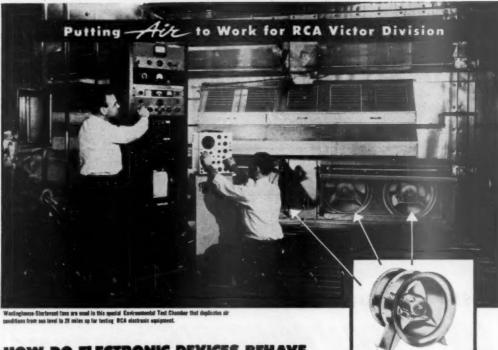




Wichite. It is used to house rolling stack neces mass production of the N-47 Stratelet bomber.



age of B-47 Stratojet parts and assemblies.



70,000 FEET UP?

Lives depend on the answers found in this atmospheric testing chamber in type-test laboratories of RCA's Engineering Products Department. But the answers aren't easy to get. For the big problem is to duplicate as accurately as possible the thin, cold air of high altitudes.

The solution? Powerful Westinghouse-Sturtevant Axiflo Fans constantly circulate chilled air, force temperatures down as low as -85°F. Working against a partial vacuum, created to simulate low pressures encountered in the upper regions of the stratosphere, these fans keep temperatures uniform to within several degrees by providing a homogeneous mixture of air throughout the chamber.

No matter how you want to put air to work—whether air handling, air conditioning or air cleaning—Westinghouse offers you a complete line of industry-proven equipment to fill your needs. For complete details, call your local Westinghouse-Sturtevant office. When you do, also ask for new General Catalog 600—a 60-page reference file for Putting Air To Work. Westinghouse Electric Corp., Sturtevant Division, Hyde Park, Boston 36, Mass.

Test Chamber designed and installed by Tenney Engineering, Inc., Newark, N. J.

Auffie Pressure Fans find wide use throughout industry because of adaptability is short systems and for disthurge against high winds.



1-Bladed Aluminum wheel is non-sparking, steresism, resicking; baselies large volumes,



8-Minded Steel Wheel it non-conclusions, quest and stable I deal for Nigh Immunistress.

YOU CAN BE SURE ... IF IT'S Westinghouse

AIR HANDLING

BUSINESS OUTLOOK

BUSINESS WEEK DECEMBER 20, 1952 Business is spending as though it had no fears for 1953.

Such outlays—on new plant and on inventory—can make dreams come true. Or they can compound the error if confidence is misplaced.



Business will need a lot of capacity and a lot of inventory if it makes all the goods it talks about in setting 1953 goals.

Take just one program-more than 6-million new cars (page 25).

The auto industry will have trouble getting enough steel for 3-million in the first half of the year. Thus it seems to be shooting at sales as high or higher in the second half—normally the slack season.

Suppose it stubs its toe—falls from weekly output at an annual rate of 7-million cars in July to 314-million in November. That would hurt.

You find electrical equipment plans as rosy as those for autos.

General Electric's president, Ralph Cordiner, said this week that his company will top its 1952 sales, sees no second-half letdown.

Confidence has been welling up in businessmen ever since the election. This naturally colors their spending attitudes.

It now looks as though the value of manufacturers' inventories at yearend would set a new record above \$45-billion. That would be up \$1½-billion from July, wiping out all traces of earlier liquidation.

. Factory inventories, in fact, started up more than seasonally even before the election, partly to replenish strike-depleted steel stocks.

Inventories of all business (factory, wholesale, and retail) probably are worth about \$75-billion right now—a billion over a year ago.

Retailers, however, have held stocks below 1951 levels. And sales this month should see more goods going out the front door than come in the back—turning stocks into cash and receivables.

Either that happens, or manufacturers' new orders will slow down.

You get some idea how much business is spending from its borrowing. Banks' "commercial" loans this week will hit a new peak around \$23½-billion. That's fully up to expectations (BW-Oct.11'52,p17).

This means an expansion of \$3-billion since July. In the same period last year, the rise was a shade over \$2½-billion.

Heavy business borrowings in a tight money market once again will focus attention on credit control. To meet the demand, banks have had to rediscount paper with the Federal Reserve as never before since the early 1920s (page 68). Rediscounts top even 1928-29 peaks by about 50%.

Demand for new money is bound to stay high with business expanding at its present rate.

Fourth-quarter outlays for new plant and equipment are at a seasonally adjusted annual rate of \$28.3-billion, the latest survey of the Dept. of Commerce and the Securities & Exchange Commission points out. That's a new record, pushing 1952 about 2% ahead of 1951 (page 26).

BUSINESS WEEK DECEMBER 20, 1952

The first quarter next year will see another rise-to \$28.7-billion.

Even in manufacturing, where the whirlwind rate of expansion creates lingering fears of a letdown, next year's first-quarter plans promise at least to match late 1952's record rate, allowing for seasonal factors.

Bear this in mind: Business outlays for new plant and equipment, well into next year, may top the intentions reflected in the current government survey. Those expenditures were budgeted, for the most part, before the election.

The new confidence now has to be weighed in. Several plans for plants, shelved earlier this year, already are being dusted off.

Financing our huge plant expansion—almost \$27-billion in 1952 alone
—involves raising a great deal of money in the securities markets.

This year's figure will come close to \$71/2-billion.

Not all of these stocks and bonds represent new money, of course. A portion (relatively small) refunded securities sold earlier. And part of it was to capitalize previous bank borrowings.

Yet even this turning of bank loans into permanent capital can be traced to expansion: It had been necessary to go to the banks for working capital mainly because new plants had depleted cash so much.

Construction figures for the fourth quarter apparently are going to make an unusually strong showing. There are two major factors:

Open weather has favored outdoor work until recently.

Time is being made up on projects delayed by the steel strike just as rapidly as materials will permit.

Value of all construction put in place in the fourth quarter should top \$8,350-million, against \$7,950-million a year ago.

Home building this year will displace 1951 as second best on record. New dwelling units started in November totaled 86,000. That was 15% ahead of a year ago, bringing the 11-month figure to 1,052,000.

Even if December sees no more than last year's 61,000 starts, 1952 will top 1.1-million units against last year's 1,091,300.

Better-than-seasonal records for construction seem to be strengthening the lumber market after a disappointing third quarter. At least, there are signs of stiffening in plywood prices.

By contrast, there were two plywood cuts at this time last year.

Industries using copper will get more this year than at any time since World War II, despite all the price and supply difficulties.

Deliveries out of domestic production and imports will top 1.4-million tons. Last year's total was 1,368,000 tons.

Even so, not many in the industry are happy. They don't look for any peace of mind until the price snarl—which sees domestic copper selling at 241/2¢ a lb. vs. 361/2¢ on imports—is unraveled.

Most feel the U.S. price is too low to spur new output.

for Quality metals production At GENERAL METALS modern forge plants, batteries of powerful drop hammers speed production of quality-

controlled, high-strength forgings for unsurpassed dependability and performance.

Controlling quality from blast furnaces to finished products has made Metals Division of GENERAL METALS CORPORATION the leading Western source of all types and sizes of aircraft forgings, as well as castings and forgings for general industry.

High-speed forging press with manipulator speeds production of quality forgings for aircraft and industry.

GENERAL METALS CORPORATION

EXECUTIVE OFFICES: 18th & FLORIDA STREETS . SAN FRANCISCO 10, CALIFORNIA

ENTERPRISE BIVISION . Marine & Stationary Diesels, Oil Burners, Food Process Equipment... Plants at San Francisco, Calif. ADEL BIVISION • Industrial, Aircraft & Marine Hydraulics . . Plants at Burbank, Calif., Huntington, W. Ya.
PACIFIC FITTINGS BIVISION • Pipe Fittings, Couplings, Nipples . . . Plants at San Francisco & Hollydale, Calif.
METALS BIVISION • Foundry & Forge Products. . . Plants at Oakland & Les Angeles, Calif., Mouston, Taxas



When you plan printing for any purpose, remember this trade-mark. It brings you year-round greetings of happier results. It represents the diversified and standard Mead brands of printing papers for every business and advertising use.

Mead Papers include D&C coated papers and Wheelwright bristols and covers. Among these popular papers are surfaces, sizes, weights, and colors to meet every printing need.

Your printer or lithographer, and America's leading paper merchants behind him, knows Mead Papers as Santa Claus knows good little boys and good little girls. He knows that the uniformity and quality of these popular papers save time, trouble, and money on every job...on big jobs, little jobs, simple jobs, elaborate jobs.

Mead Papers mean business. Specify and use them for every job, every time.

THE MEAD CORPORATION "PAPER MAKERS TO AMERICA"

Sales Offices: The Mead Sales Co., 118 W. First St., Dayton 2 • New York • Chicago • Boston • Philadelphia • Atlanta Estatuseta 1846

T.M. Reg. U.S. Pet. Off.



The season's greetings will be expressed in many forms this year, and coated Mead PAPERS provide the printing base for such keepsakes as limited, illustrated editions of famous Christmas stories.



If your shopping was simpler this year, the chances are that you were helped by the many Gift Catalogs mailed by department stores and specialty shops . . . on coated MEAD PAPERS, of course.

FIGURES OF THE WEEK

(-1923-25=100			HIELD,	923-25=10	00-
270			ALCOHOL:		270
240	STORES.			STATE SHOWING	- 240
	STREET,	AAE	MIT ALL		
210			V	BE INTE	210
	1952				
180	To the same		Signal Control		180
150 La cotto de la contraction del contraction de la contraction d	بلبينانينك	بالبيناب	البيارانيناء	S O N	150 ليب
1948 1949 1950 1951					
	- § Latest Week	Preceding Week	Menth Age	Year Age	1946 Averag
Business Week Index (above)	*248.1				173.
	. 210.1	121/1/	27017		
PRODUCTION	2,196	+2,207	2,212	2,097	1.28
Steel ingot production (thousands of tons)	126,631				62,88
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)	\$41,543			and the contract of	
Electric power output (millions of kilowatt-hours)	8,140			7,667	
Crude oil and condensate production (daily av., thousands of bbls.)	6,562				
Bituminous coal production (daily average, thousands of tons)	1,673	1,800	1,800	1,880	1,74
TRADE					
Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars)	73	77	82	77	8
Carloadings: all other (daily av., thousands of cars)	47	58	60	52	5
Department store sales (change from same week of preceding year)	+1%	-14%	-7%		
Business failures (Dun and Bradstreet, number)	157	120	148	143	21
PRICES					
Spot commodities, daily index (Moody's Dec. 31, 1931 = 100)	402.5	405.3	408.2	457.9	311.
Industrial raw materials, daily index (U. S. BLS, 1947-49 = 100)	93.8	94.8	94.9		1173.
Foodstuffs, daily index (U. S. BLS, 1947-49 = 100)	84.7	85.5	87.0		††75.
Finished steel, index (U. S. BLS, 1947-49 = 100)	130.6	130.5	130.5	124.9	1176.
Scrap steel composite (Iron Age, ton). Copper (electrolytic, Connecticut Valley: lb.).	\$42.00 24.500e	\$42.00 24.500¢	\$42.00 24.500¢	\$42.00 24.500¢	\$20.2 14.045
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)	\$2.48	\$2.46	\$2.47	\$2.55	\$1.9
Cotton, daily price (middling, ten designated markets, lb.)	32.85¢	33.34e	34.47¢	41.60e	30.56
Wool tops (Boston, lb.)	N.A.	\$2.07	\$2.00	\$2.30	\$1.5
FINANCE					
90 stocks, price index (Standard & Poor's)	206.7	204.7	198.1	186.1	135.
Medium grade corporate bond yield (Baa issues, Moody's)	3.50%	3.51%	3.54%	3.61%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)	21-21%	21-21%	21-21%	21%	1-1%
BANKING (Millions of dollars)					
Demand deposits adjusted, reporting member banks	55,127	54,392	53,312	54,243	1145,210
Total loans and investments, reporting member banks	78,353	78,266	76,997	73,771	t+71,147
Commercial and agricultural loans, reporting member banks	23,136	22,949	22,727	21,219	119,221
U. S. gov't guaranteed obligations held, reporting member banks	32,819 26,860	32,947 26,751	32,015 25,696	32,115 24,980	1149,200
NONTHLY FIGURES OF THE WEEK		Latest Month	Preceding Month	Year	1946
Average weekly earnings in manufacturingNovember.		Month \$70.66	Month \$70.59	Age \$65.85	Average
Housing starts (in thousands)		\$70.66	101.0	74.5	\$43.82 55.9
Bank debits (in millions)November.		\$130,188		\$132,158	\$87,502
Preliminary, week ended Dec. 13, ++ Estimate	† Revised.	, , , , , , , , , , , , , , , , , , , ,		, and and	401,704
N.A. Not available.	& Date for "	Latest Week	" on each se	ries on reque	u.

in BUSINESS this WEEK ...

GENERAL BUSINESS:	
MORE CARS FOR MORE PEOPLE. Detroit sees a shift in buying habits and booming business ahead	LIGHT grandd plant.
INVESTMENT HITS A NEW PEAKp. 26	BIRTH
"BETTER THAN NATIONALIZED MEDICINE." Tru- man's commission outlines a new national health	ing ho

"BETTER THAN NATIONALIZED MEDICINE." Truman's commission outlines a new national health insurance plan that may be used in part by the new administration.....p. 27

LIGHTING UP THE FAIRLESS WORKS.	The boss'
granddaughters help christen Big Steel's	huge new
plant	p. 30

Business Briefsp. 34

SPECIAL REPORT:

BUSINESS ABROAD:

NORTH AFRICA: HOW LONG CAN
U. S. STRADDLE THE FENCE? Nation-
alist outbreaks may force a firmer
standp. 110
A NEW BRITISH COUSIN FOR PEPSI.
Pepsi-Cola and Schweppes mixers
are teamed in a transatlantic fran-
chise swap p. 112
Business Abroad Briefsp. 114

Business Outlook						17
Washington Outlo	ok					37
International Outle	ook		*			107
Personal Business		 				127
The Trend						144
Figures of the We	ek					21
						20
Local Business						58

EASIER SKATING FOR DOWN-

FINANCE and MARKETS:

HOW SOUND IS THE "EISENHOWER MARKET?" Some Wall Street skeptics have no faith in it, despite ticker's upward trendp. 62
Finance Briefsp. 68
THE TREASURY'S NEW TEAM. Sec retary-designate George M. Hum phrey has picked three of his top assistants
THE MARKETS: THE LONG SLIDE LEVELS OFF. The worst is probably over for commodity pricesp. 76
BULL MARKETS: HOW LONG DOTHEY LAST?

UNION SECESSION in textile group hits a snag....p. 117

GETTING READY TO BE LABOR'S
ADVOCATE. As Secretary of Labor,
Martin Durkin will face plenty of
difficulties with Congress, labor, and
industryp. 118

T-H INJU						
workers						
strike	provis	ions	unce	onsti	tuti	onal
after Tru	ıman i	nvoke	s the	law	in e	case
affecting	ctom	prog	ram		n.	121

Labor Briefs p. 124

NEW	PRODU	JCTS:							.p.	90
New	Products	Briefs	0	0 .	0	0	0		.p.	93

CALLING IN PSYCHOLOGISTS EARLY. To help "humamize" complex machinery so workers can cope with it, psychologists are trying to get in on the ground floor of design .p. 80 Production Briefsp. 82

AN OLD COMPANY TRIES NEW

MARKETING:

		BUSIN L. Davi				
of luri	ing pr	rivate e atomic	nterp	rise	into	the

HOW APPLIANCE MAKERS BOOST SALES. They've done it in the post six months by developing new products, putting new gimmicks and styling into old onesp. 41

EARLY SHOWING of the jewelry industry's spring lines brings a flock of orders, may end the seasonal ups and downsp. 50

FIELDS. Cleveland Graphite Bronze Co. gets into a technical field by buying a small company with knowhow, dovetailing it into its own setup p. 86

REAL ESTATE:

PRODUCTION:

BUILD IT ON A LEDGE. A prefab with a special foundation is the an- swer for land that looked impossible for building
FIRST CUSTOMER. Alcoa's alum- inum-clad skyscraper convinces New York builder to use same material in an office building p. 133
LAND-POOR STANFORD OPENS ITS ACRES ON 99-YR. LEASES. Uni- versity's real estate plans include fac- tories, homes, and shopsp. 134

CARRY

GOVERNMENT:

CARRYING ON FOR THE WAGE BOARD. With industry and labor members gone, four public members hold the fortp. 116

Here's why I installed Frigidaire Air Conditioning in December



Summer slump! As temperatures rose...hot, tired, irritated workers produced less and less and accuracy took a nose dive. I resolved that air conditioning was going in next summer.



Wister tip! I'd figured on an April installation. But the Frigidaire man showed me how I could save now while there is an abundance of installation men and of equipment at present low prices.



Minimum interference! He sold me on those dollar and cent savings. And with plenty of time and manpower, Frigidaire made the installation so there was no interference with production.



Morale booster! I'm all set for next summer now. And the employees are getting a real lift, too, seeing this tangible proof and promise of real working comfort next summer.

Frigi Get ready mer's promanufacture executive, stalling Fr Four-way every Frigit without elinstallation Exclusive gives uned and dehure to a continue multiple to cond whole buildings.

Frigidaire brings you 4-way cooling at no extra cost!

Get ready to put a boost in next summer's production, efficiency, sales. Any manufacturer, store owner, business man, executive, can show a real saving by installing Frigidaire Air Conditioning now!

Four-way air distribution is built into every Frigidaire for allover circulation without elaborate duct systems or extra installation costs.

Exclusive Multipath Cooling Unit gives unequalled efficiency in cooling and dehumidification.

Large, cleanable-type filter . . . really blocks out dust, dirt and pollen.

Minimum space needed for installation. Styled for beauty. Quiet in operation.

Powered by Frigidaire's famous XD Meter-Miser sealed compressor that's warranted for five full years.

See or call your Frigidaire Air Conditioning Dealer for FREE survey — his name is in the Yellow Pages of your phone book. Or write Frigidaire Division, General Motors Corp., Dayton 1, Ohio.

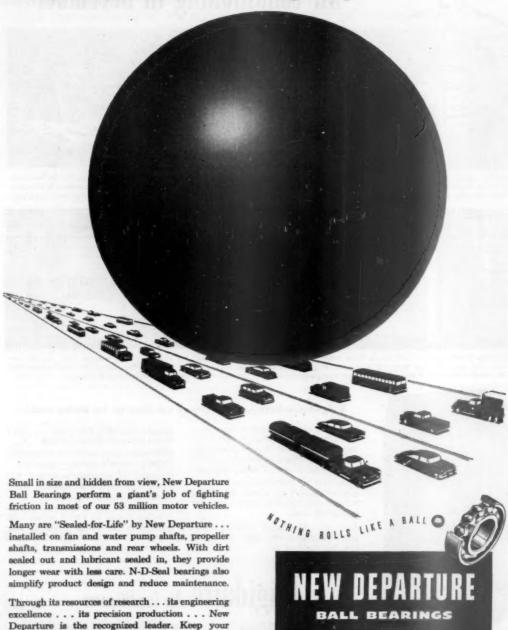
Frigidaire Air Conditioners



The most complete line of air conditioning and refrigeration products in the industry.

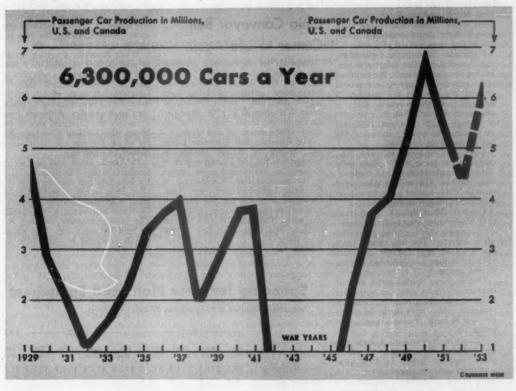
Little Giant of the highway

eye on the BALL to be sure of your BEARINGS!



NEW DEPARTURE . DIVISION OF GENERAL MOTORS . BRISTOL, CONNECTICUT

DECEMBER 20, 1952



DETROIT SEES A SHIFT IN BUYING HABITS THAT ADDS UP TO

Nore Cars for More People

On the threshold of the 1953 model vear, the automobile industry is bubbling with an optimism such as it has rarely felt. Maybe, auto men think, it's on the brink of an era when more people will buy more cars-and turn them in faster. Maybe the car-buying and car-owning habits of the U.S. are changing-in a way that would mean a permanently larger market for the industry and an important boost for business in general.

Behind the shiny hopes lie three

· For the short-term, retail sales have been perking up gaily in what is

normally a dragging season.

• For the long-term, there are some very cheery vital statistics. Birth rate, money in the bank, car use, and others all point to an expanding market for several years to come.

· Both short and long-term is the industry's faith that the country will be solidly grounded on the Eisenhower administration. Auto makers as a class are probably more firmly behind Eisenhower than any other industry.

The new era that Detroit increasingly believes will sprout from these factors looks something like this: Cars on the road will jump to 45-million to 50-million, instead of the prewar range of 25-million to 30-million. That would call for regular annual production of between 5-million and 6-million cars, instead of the under-4-million range of the 1930s. The annual scrapping of cars is expected to reach 3-million, more

than double the prewar rate.
• Easing Prices—There's another element in sight for next year: a softening of prices. That's likely to spring from Ford's insistent challenge to Chevrolet's first place in sales. So long as production quotas hold down the rivals, the challenge will be just words. But Detroit feels sure that quotas will be dead by midyear, unless the Korean war is intensified. Free production would give a free hand to the battle between Ford's carry-over into 1953 of its highly successful 1952 line and a considerably revised 1953 Chevrolet.

This battle, with hard selling and no holds barred, would by itself boost volume. For example, trade-in allowances would be raised by the rivals; inevitably other dealers in a much broader field would have to follow suit. Plymouth would have to move at once, in self-defense. Then the next price tier above would have to follow, or lose business to the volume producers. The trend would extend clear up the price scale, with the consumer saving money—and buying more cars—at all levels.

• Expansion—To meet the expected increase in demand, the industry is continuing to expand, despite the existence of the record-smashing new or improved capacity developed in the past five or six years. At the moment, there is something of a lull. But the wise men of Detroit think 1954 and 1955 will see a somewhat smaller version of the burgeoning of the late 1940s.

Ford could be a case in point. The company has spent \$800-million since 1945 on modernization and improvement. Another \$244-million is budgeted through 1954; further plans have been sketched in roughly through 1961.

• Controls—Meanwhile, production controls—however meager their future—are cramping 1953 planning for the whole industry. The first quarter limit has been set at 1,250,000 cars; last week 1.5-million was indicated for the second quarter.

Detroit views quotas with marked impatience. Auto men are sure that 6-million assemblies could be absorbed next year. Also, they think the 6-million will be built, if quotas continue to

Translated into over-all manufacturing—including the output of Canadian plants supplied largely by U.S. sub-assemblies and components—that would mean about 6.3-million passenger cars turned out next year. On this basis, 1953 production would run a fair second to 1950's combined U.S.-Canadian total of 6,949,39. It would be well ahead of 1951's 5,619,649, now in second place.

If you tack onto the estimate a reasonable 1,350,000 trucks and commercial vehicles, you get an aggregate of 7,650,000. That's awe-inspiring compared with such prewar figures as the 5,621,045 peak in 1929, and the 1931-1941 average of around 3.5-million.

 Trade-Ins-A fair share of next year's business will come via trade-ins of the enormous 1950 model class. According to some of the closer students of the automotive scene, trade-ins move in definite cycles. Some people turn in cars each year; this group is shrinking as reduced allowances increase the amount of cash required.

Another large group operates on a three-year cycle, in order to avoid the big repair bills that begin to crop up. The three-year group is expected to be a real bulwark for 1955 sales.

The same calculation would mean that 1954 wouldn't be quite so good as 1953. Detroit won't argue too hard with that; it knows that next year's prospects are above the long-term average.

Ohio Conveyor Belt Comes to Life Again

Proposals for an overland conveyor belt to supply raw materials to steel mills in the Akron, Canton, and Youngstown sections of Ohio have bogged down twice in the Ohio legislature (BW-Nov.22'52,p50). This winter the project seems ready to flare up again—with a couple of new sparks.

The Riverlake Belt Conveyor Lines, Inc., backed by Akron, Canton & Youngstown RR and Goodyear Tire & Rubber Co., has made a major change in the proposal that it will send to the Ohio legislature early next year. Cleveland is picked for the northern terminal, instead of Lorain, 30 mi. to the west. The proposal calls for an overland belt from Lake Erie to the Ohio River.

Main reason for the change, it is be-

lieved, is the hope of winning legislative support from the populous Cleveland district, which has the largest number of legislators in the state. The conveyor belt plan—strongly opposed by the railroads that now haul raw materials to the area—was smothered in committee on both its previous appearances. It never reached the floor of the legislature for a vote.

While Riverlake is getting up steam to push its belt proposal, B. F. Goodrich Co. has advanced a belt plan of its own to serve Cleveland mills. The Goodrich belt would stretch the 5 mi. from the Cleveland harbor to plants in the Cuyahoga valley. Although it would serve only the Cleveland area, it would bypass the winding Cuyahoga River, up which the big ore boats are now pushed by costly tugs.

Both belts would haul iron ore from freighters at the Cleveland docks, with the Riverlake belt carrying it on to the Ohio River as well as to the Cleveland mills. Cleveland interests estimate the Goodrich belt would cost \$10-million. The rubber company estimates it can be built for much less. The Riverlake belt is estimated at well above \$200-million.

Spending for New Plant and Equipment

Seasonally Adjusted at Annual Rates (Billions of Dollars)

	1951				_	1953			
	Jan Mer.	Apr June	July- Sept.		Jan,- Mac.		July- Sopt.	Oct Dec.	Jan Mar.
Manufacturing	\$9.5	\$11.1	\$11.7	\$12.0	\$12.0	\$12.8	\$11.9	\$13.4	\$13.5
Mining		1.0		0.9	0.9	0.9	0.8	0.9	1.0
Rails	1.3	1.5	1.5	1.6	1.6	1.5	1.2	1.4	1.3
Transportation Other Than Rail .	1.5	1.5	1.5	1.5	1.5	1.4	1.3	1.5	1.2
Public Utilities	3.7	3.9	4.0	3.9	4.1	4.0	3.7	4.0	4.4
Commercial and Others	7.6	7.5	7.5	7.4	.73	6.9	6.9	7.1	7.3
Total	24.3	26.4	27.1	27.3	27.4	27.4	25.7	28.3	28.7

Investment Hits a New Peak

This week Securities & Exchange Commission and the Dept. of Commerce reported that capital outlays for new plant and equipment will get off to a roaring start in 1953—at an annual rate of \$28.7-billion. The chart shows that businessmen plan to plow back more money into their companies in the first quarter than they did either in 1951 or 1952. As it is, this year will end 2% over 1951.

That's the first-quarter picture for business as a whole—and for manufacturing, mining, and commercial and service industries. Public utilities will show the healthiest gain—from \$4.0-billion to \$4.37-billion. Some industries, however, will pull in the reins in the first quarter. Rails will taper off from \$1.4-billion to \$1.3-billion and other transportation groups will drop from \$1.5-billion to \$1.2-billion.

"Better Than Nationalized Medicine"

- When President Truman's national health insurance plan bogged down, he set up a commission to evolve a better formula.
- The findings and recommendations of the commission outline a program to provide coverage for all without regimenting doctors.
- The committee's proposals dovetail with so many of Gen. Eisenhower's own ideas that the new administration may use part of the report as framework for its own plan.

Last December President Truman, finally admitting defeat in his plan for national health insurance, set up a commission expressly to find a better plan-a plan to make doctors, hospitals, and medicine more readily available to all Americans.

And in his successful campaign, President-elect Eisenhower promised that his administration would try to find a way to provide aid to the sick and to keep the healthy well.

· Fair Deal Alternatives-This week the President's commission on the health needs of the nation brought out its findings and recommendations: Technically, the commission is a lameduck body. Its report goes to President Truman, who leaves office on Jan. 20, taking Federal Security Administrator Oscar Ewing and the whole retinue of Democratic welfare officials with him. But what the commission has to sayand it spoke with unanimity except on a handful of minor matters-dovetails with a lot of the general ideas held by Eisenhower and his advisers, including Mrs. Oveta Culp Hobby, the next Federal Security Administrator.

Here is the system Truman's com-

mission plumps for:

· The federal government should make grants to aid state health organizations to help finance both private and public prepaid medical and hospital insurance.

· A payroll tax levied against members of such organizations as the Blue Cross or even state-run bodies would be one way of paying for expanded care.

• A subsidy should be paid to state health departments so they can provide better care for the needy.

• Federal grants should be made to medical colleges for the schooling of physicians and nurses.

• Federal grants for hospital con-struction should be extended and en-

· Subsidies should be set up to pro-

vide for increased medical research.

By these methods, the commission says, America can maintain its traditionally free medicine, free choice of physician, and yet make medical treat-

ment available to all.

· Republican Parallel-The commission is headed by Dr. Paul Magnuson, a Republican. Although the American Medical Assn. was not represented on the 15-man committee, directors of hospitals, medical school professors, representatives of nursing organizations, and the public joined in the recommendations. They agreed that the annual bill for these services may run to \$1billion, just twice what the federal government is now paying out for medical services.

• First Job-Even before she takes office as Federal Security Administrator, Mrs. Hobby already has been assigned a major task by the administration she will join on Jan. 20: Come up with a health and welfare program, and you will make the Eisenhower four years

The general himself laid out the general lines in his major social security speech in Los Angeles on Oct. 9. He said: "Neither the existing private health insurance plans nor the Administration program for national socialized medicine covers all the people. Neither provides adequate protection. For example, neither one has yet found a way to insure against a serious illness which is not temporary, but is catastrophic for the entire family concerned." He said usefulness of a federal loan or other aid to local health plans should be explored, and he approved of federal aid for construction of additional hospitals. All this, he insisted, should come within the framework of voluntary action and community autonomy. • Collaboration-The Magnuson com-

mission had the foresight to send advance copies of the first published volume of its report to Mrs. Hobby, to Gov. Sherman Adams, who is

Eisenhower's top aid, to retired Gen. Wilford Persons, Eisenhower's congressional liaison man, and to Sen. Taft, the Republican leader in Con-

Magnuson hopes that the report may serve as groundwork if Eisenhower accepts Taft's idea for a new commission to make a broad study of the ability and necessity of government aid to the citizenry to improve their

welfare.

Magnuson is confident that the report will not be shunted aside as so much Democratic boondoggling. Magnuson qualifies as an objective expert he has been outspoken in his opposition to Ewing and national health in-When he was head surance. Veterans Administration medicine, he established a system of at-home care for veterans, using private physicians whose fees were paid by Washington. Problems-The commission sought solution to the health needs of the nation from this framework:

• People with incomes of \$3,000 a year or less cannot afford medical services when needed. This group totals 48% of U.S. families.

• Insurance prepayment plans; though subscribed to by over half the people of the country, now cover only about 15% of private expenditures for medical care. The biggest deficiency is that present plans do not offer comprehensive coverage, do not protect a family from critical and long-term ill-

• By 1960, 22,000 more doctors will be needed than projected estimates of the doctor crops for that year indicate will be available. And if comprehensive care is to be offered by then, the country would need 8,000 more doctors to handle the work.

• The country's 80 medical schools need \$10-million to \$40-million more money every year for operating, and \$75-million a year in hospital

construction is needed.

• Better Than Nationalization-The commission recommends an annual expenditure of \$750-million to provide something better than nationalized medicine. This recommendation is really the political focus of the report -the recommendations for other aids are auxiliary.

The scheme is reminiscent of legislation introduced in Congress in 1949 by Senators Ives of New York, Flan-ders of Vermont, Vice-President-elect Nixon, and other "liberal" Republicans. It is a method of using federal aid to private and public insurance plans, but under state rather than federal control.





ON NEW YORK'S PIERS

Crime Comes Out in the Open

It was no ordinary crime story that made page one headlines in the New York press last week. For its central characters were not a mere handful of people but the greatest city and shipping center in the U.S.—the Port of New York. In hearings before the New York State Crime Commission, witness after witness told how the underworld has gripped the waterfront.

 An Old Story—The fact itself was not news; crime on the waterfront is an old story to New Yorkers and to all who ship or receive merchandise through its port. They have known for years that everyone who deals with the waterfront, from businessman to common laborer, has become a victim of extortion, kickbacks, pilferage—and sometimes even murder.

Most know, too, where to put the finger for a large part of the blame: the International Longshoremen's Assn. (AFL). It has long been known that ILA's ranks are riddled with exconvicts, thugs, hoodlums. Yet, up to now, nobody could ever pin any wrongdoing on the hired thugs or on ILA officers.

 Loss of Business—What few had realized clearly, though, was how tight the control by racketeers has become.
 Probably the most important revelation in the Crime Commission hearings so far has been this one implication:
 Criminal control is beginning seriously to hamper the port's business.

Already enough companies have

moved their shipping operations to other ports to affect New York's competitive position. In 1946-48, the port's share of the nation's general cargo tonnage ran around 37%. Right now it's down to 32%—lowest in peacetime history except for 1932, when the depression pushed it down to 30.9%.

I. Invitation to Piracy

In order to understand just why waterfront crime has hit New York harder than any other port, you first have to visualize what the Port of New York embraces.

Perfect Harbor—It is probably because of the near-perfection of its harbor that New York has become the world's largest city. In reality, this harbor is a collection of interlinked ports, including several cities in both New York and New Jersey.

Almost any of New York's eight large bays is as big as most European harbors. It has 200 deepwater piers (not counting open quays). Serving the port are 12 railroads, linked by lighterage and carfloat operations with every pier in the harbor.

Because of all these-and morefacilities, you get faster turnaround than in most ports. Ships can be loaded or unloaded simultaneously from lighters and from piers.

Finally, from New York there are direct overseas routes. Most ships sail-

ing from other ports make intermediate stops.

• Other Services—Moreover, there are other business advantages to shipping from New York. The port has more brokers, more insurance agents, more freight forwarders, faster communications than other ports. And New York is the nation's banking headquarters—which facilitates foreign-exchange transactions, letters of credit, etc.

Ideally then, a shipper could save both time and money by using the Port of New York. But the trouble is that it is also an ideal place for crooks to get money. Obviously, a port that does as much business as New York would tempt any pirate. What concerns the authorities now is whether the pirates will leave enough of the port for it to maintain its preeminence.

II. What "Crimes?"

It was partly because of this fear that Gov. Thomas E. Dewey of New York ordered the State Crime Commission about a year ago to make its current investigation. Dewey placed \$500,000 at the disposal of the commission.

Early in December, the commission opened public hearings. It has subpoenaed financial records of shipping and stevedoring companies and bank accounts of waterfront labor leaders.

• Basic Findings-So far, the public testimony has served more, to stir up

public opinion on the morality of business and union practices than it has to uncover actual criminal activities. Here's what the testimony showed, basically:

Officials of some large stevedoring concerns regularly buy "goodwill" by making gifts of bonds or money to officials of shipping concerns. Example: Jarka Corp., largest of the stevedoring concerns, paid out \$489,582 from Jan. 1, 1947, to June 30, 1952. It listed the gifts as "petty cash."

 Union officials have for many years received large sums from stevedoring companies in return for protection against strikes and other labor troubles.
 Example: Daniels & Kennedy, Inc., and J. Arthur Kennedy & Son, Inc., paid out \$27,850 in "goodwill" to union officials from 1947 to 1951.

Hiring bosses on piers are designated by union officials, not by employers—although the ILA contract is supposed to provide freedom of selections.

tion by management.

 Union hiring bosses, who often have criminal records themselves, encourage and facilitate the hiring of other criminals for longshore work. This gangster element is alleged to operate various rackets—loansharking, kickbacks, pilferage on a grand scale.

Union leaders and local politicians work together for their mutual benefit. Example: Mayor John V. Kenny of Jersey City has been connected by implication with strikes on

the waterfront.

III. How It Works

Most authorities trace the New York waterfront's evils to three major sources: (1) the system of hiring longshoremen by the pier bosses, (2) the viselike control over truckers by the so-called public loaders, and (3) the high rate of pilferage due to anarchy of pier supervision, wide employment of thugs, low morale and morals among workers.

• Longshore Corruption—The longshore labor situation isn't directly painful to shippers, but opens the door to costly corruption. The trouble is there are twice as many longshoremen as can be employed regularly. Of the 42,000 men classified as longshoremen, onethird work less than 100 hours a year. And only about 10,000 earn as much as \$3,000 a year.

The main reason for this unbalance is the system of hiring—the "shape-up." What this means is that a longshoreman is hired for each separate unloading job. Each day he goes to a pier at 7:55 a.m., hoping to be picked to work in a loading or unloading gang.

Whether or not he is picked to work that day depends on the hiring bossoften a man with a criminal record. Since there are always more longshoremen than there are jobs, a man can assure himself of a job only if he pays off the hiring boss in some way—usually a kickback of a few dollars from that day's pay. Murder comes in as a threat that keeps this system going: If a long-shoreman objects, or tells the authorities, a loading boom drops on him, or he is shot in a bar—accidentally.

• The Public Loaders—What hits the shippers harder is the public loaders. The loaders originally—around World War I—were brought to piers by truckmen as helpers. But now they have a monopoly on pier labor for loading trucks. Even if they are not needed or wanted, they get paid a schedule of rates for every pound of cargo that is lifted from a pier and loaded on a truck.

The truckers pass on that cost to the consignee. But the fee may vary from pier to pier, from shipment to shipment. This creates unexpected costs—and is a major reason why some companies are diverting shipments else-

where.

• Millions in Pilferage—Finally, pilferage has become a serious problem in the port; it runs into millions of dollars a year. At the Crime Commission hearings, an official testified to one loss amounting to two tons of valuable cargo—plus the lifting crane that handled it. Biggest loss reported to the commission up to last week was 10 tons of steel from Pier 46, then being used by the United States Lines. Said Jones F. Devlin, general manager of the line, in reporting it: "It is remarkable how one could get away with it."

IV. Economic Ghost Town?

Will this investigation really clean up the waterfront? The experts on the subject are split on the answer to that.

Pessimists point to the fact that a long series of investigations in the past

got nowhere.

Optimists think this is the first real investigation, and that it will break the criminal grip on the harbor. They feel that the State Crime Commission is determined to get all the facts about both crime and employment conditions—something that other investigations stopped short of. If the commission does follow through, it may lay the groundwork for basic remedies.

• Grand Jury Aid—Meanwhile, the Crime Commission is getting some help elsewhere. This week, the Brooklyn Rackets Grand Jury started calling witnesses on Brooklyn waterfront conditions. Kings County Judge Samuel S. Leibowitz told the jury that shippers who hestitated to talk about shakedowns would be brought into his court-room "and let us see what we can do under the law to loosen their tongues." "If crime on the waterfront isn't stamped out," he said, "New York will become an economic ghost town."

Figures on Ford

Wall Street Journal's findings on Ford's earnings—which are pretty close—puts that company in second place.

Last week the Wall Street Journal printed estimates on Ford Motor Co. carnings. It was the first time anyone had published the biggest business secret of modern times.

The article put Ford's 1951 sales near \$3-billion, with profits after taxes, of \$87-million-making Ford, not Chrysler, the second-largest U.S. auto-

motive enterprise.

 No Plant—The article set off a wave of rumors that the story had been "planted," to kindle interest in Ford stock and earnings prior to a public offering of the tightly held company shares. However, there were no signs that Ford was considering that.

• In Line—Actually, the figures were the result of some smart financial sleuthing on the part of tl.e Journal. And the estimates were not too far off base. What errors there were tended to balance each other out. For example, earnings for 1951 were understated by the Journal at \$87-million. But overstated earnings for 1950 (\$279-million, according to the Journal) made the two-year total methy accurate.

the two-year total pretty accurate.

Good Guesser—The usual technique for estimating Ford carnings after dividends—if any—is to compare surplus accounts in the yearly balance sheets that Ford is required to file to do business in Massachusetts. But these guesses are unreliable. For instance, the balance sheet for the fiscal year ended Dec. 31, 1951, suggests net profits for that year of \$135-million to \$140-million; while in 1950, the balance sheet indicated earnings of \$197-million to \$209-million. The Journal's figures were much more accurate than these.

The WSJ figures may have resulted from a leak at Ford. The company publishes for private circulation a limited-edition annual report.

But it isn't necessary to assume a leak. The Wall Street Journal maintains an analytical department whose business it is to interpret financial statements. That department could arrive at fairly accurate conclusions from scrays of available data. Even net sales—the area in which the Journal may have been a little further from the facts than it was on its annual earnings sums—could be approximated from the Ford discount structure and a breakdown of the various body types made in any year. Neither fact is a too-restricted piece of information.



SPARKS FLY-as tons of molten steel pour into a huge ladle after the first open-hearth heat was tapped. The charge was set off when . . .



CAROL FAIRLESS, granddaughter of the boss, pressed a button.

Lighting Up the Fairless Works



Waiting



Thanking



Hugging

BUSINESS WEEK • Dec. 20, 1952



NANCY FAIRLESS, another granddaughter, touches the fiame of an oil torch to the end of a fuse leading to the interior of the towering blast furnace.

T WAS ALMOST a Fairless family picnic last week when production of both iron and steel got under way at the giant new plant of U. S. Steel Corp. at Morrisville, Pa.

The whole works is named in honor of Benjamin F. Fairless, board chairman and chief executive officer of Big Steel. Three other members of his immediate family had their names tagged to single units of the vast operation during a special ceremony held Dec. 11.

First, his wife christened blast furnace No. 2 as "Hazel." Initial operation of this unit is scheduled for next month.

Second, his eldest granddaughter, little Nancy Fairless, lighted blast furnace No. 1, which has been named after its young sponsor.

Next, an even younger granddaughter, had her name, Carol, put on the first open-hearth furnace to be tapped.

Naming furnaces after women is traditional in the steel industry. Fairless himself explains it this way: "A blast furnace is always known as a 'lady' and is named for one—not because the furnace is a thing of shapely beauty, exactly, but because it is inclined, at best, to be somewhat temperamental."

Several echelons of Big Steel's top officials, with their wives, were present to join in the commemorative ceremonies, marking completion of important parts of the Fairless Works. The plant is designed to produce 1.8-million tons of ingots a year and a variety of finished steel products. It should be in full operation by late summer of 1953.

The new Fairless Works will have the most modern equipment of any fully integrated steel mill in the world. It won't be the biggest in operation, but there is plenty of room for expansion—enough in fact to triple the size. The initial program includes two batteries of 87 coke ovens each, two 28-ft. blast furnaces, and nine open hearths.



Works boss Berdis coaches . .



... Mrs. Fairless at christening ...



. . . then congratulates her.



Admiring



Talking



Tiring

Birth of a Bond Syndicate



YES OR NO? Syndicate representatives sweat out Port of New York Authority decision on their bid for \$35-million consolidated bond issue.



IT'S IN THE BAG: Bidders smile in relief as port authority board chairman, Howard Cullman (left), signs accepted offer.



START SELLING: Before the ink is dry, syndicate men are on the phone to give their office the go-ahead on reselling the bonds.

Last week in the offices of the Port of New York Authority, a \$35-million consolidated bond issue was signed, sealed, and delivered to an eager investment banking syndicate. There is nothing unusual about a quasi-public authority selling a bond issue to a syndicate. But there were twists to this bond sale.

• The syndicate—headed by Harriman, Ripley & Co., Inc.; Halsey, Stuart & Co., Inc.; Blyth & Co., Inc.; Drexel & Co.; Glore, Forgan & Co.; and Aldenburg, Thalmann & Co.—was the sole bidder.

 It represented a merger of two syndicates, which is the exception rather than the rule.

• What Happened—It all started when the port authority decided to do its future financing with a new type of security. In the early days of its career, PNYA issued bonds that were secured by a claim against the revenues of a particular facility—such as the George Washington Bridge or the Lincoln Tunnel. Later it pooled the revenues of all its 17 properties and issued "general fund" bonds to replace the earlier issues. Now, with a big spending program stretching out ahead, it plans to use "consolidated revenue" bonds. These will also have a claim against the general fund, but their claim will be junior to that of the outstanding bonds.

Port authority officials took their plans for the new issue to a handful of banking houses they had dealt with before, explained what they wanted to do, and asked advice. Then they announced the new issue—a bigger-than-average offering and a large hunk of the \$180-million in municipal-list bonds due to be marketed in the next month.

• Sellout—The underwriting houses got

• Sellout—I he underwriting houses got busy sounding out prospective buyers. Their reception was chilly: Investors would take the new issue only if the price were "right"—in other words, only if the underwriters who bid for the issue didn't shove the price too high.

The size of the issue and the edginess of the market prompted the investment houses to do some reshuffling. Instead of the five or six syndicates that had previously bid for authority bonds, they eventually grouped into only two.

The day before the sale, the two groups suddenly decided to throw in together to form one big syndicate. They explained that with more members in the syndicate there were more to share the risk; hence, they maintained, they could make a better bid.

The syndicate's bid was \$34.5-million for the \$35-million par value issue—an interest cost of 3.066% for PNYA. On its last previous sale the port authority paid 2.321%.

But from the market's standpoint the price was "right." The morning after the solitary bid was accepted, the entire issue was sold out.



To be large enough to manufacture a wide variety of products for midwestern steel users—yet small enough to give personal, thoughtful attention to each customer.



INLAND STEEL COMPANY

38 South Dearborn Street • Chicago 3, Illinois Sales Offices: Chicago, Milwaukee, St. Paul, Davenport, St. Louis, Kansas City, Indianapolis, Detroit, New York

55,000 circulation (AHD*)



During the past years, a great many readers of Business Week have clipped out the coupons from our "Pictures From Industry" advertisements, to send us request subscriptions for our American Hoist magazine, The CROSBY CLIPPER. Total circulation of the CLIPPER is now up to 55,000.

Now we'd like to ask . . . have we missed anybody?

Most of the men who ask us to put their names on our mailing list are contractors...engineers...railroad executives...officers and operating men in industry...plant superintendents...department heads.

This special invitation is aimed at all such management men, and at everybody who has a direct, personal job interest in our kind of equipment. We make hoists, derricks, material elevators, crawler cranes, big revolver cranes... and such industrial equipment as locomotive cranes, truck mounted cranes, wire rope blocks and clips, and car pullers.

The Crosby Clipper, published bi-monthly, carries many exclusive job stories from all over the world, with news and ideas you may be able to use. Would you like to be put on our mailing list? Drop us a line mentioning your job and company, and we'll send you The Crosby Clipper regularly, beginning with the current December issue.

WRITE TO:

Editor, The CROSBY CLIPPER
AMERICAN HOIST & DERRICK COMPANY
63 SOUTH ROBERT STREET - ST. PAUL 1, MINNESOTA

BUSINESS BRIEFS

Bankers Trust Co. of New York City plans to acquire Bayside National Bank, also of New York, through a merger. Directors of both banks have approved. Stockholders will vote Jan. 28.

Oil pact: Northern Pacific Railway Co. has made the first operating agreement, with Shell Oil Co., under its new oil lands development policy. Shell will foot the bill for exploration on about 6,000 acres of Northern Pacific land in the Williston Basin up to the time of commercial production. After that, Northern Pacific will pay 39% of the costs and get 39% of the output.

The Jacobs family lost control of F. L. Jacobs Co. after a 39-year reign over the automotive parts concern. A Protective Stockholders Committee won seven out of nine seats on the board at the annual meeting.

Sports car fans learned that the seventh International Grand Prix road race will go on at Watkins Glen, N. Y., next fall. Race officials considered suspending the racing-car classic after a serious accident injured 13 persons and killed a small boy last September (BW-Sep. 27'52,p33).

Merger of Webster-Chicago Corp., maker of wire recorders and record changers, into Emerson Radio & Phonograph Corp. has been approved by directors of the two companies. If stockholders agree, Webster-Chicago will be operated as a division of Emerson by Webster-Chicago's present personnel, bolstered somewhat by Emerson's.

Seventh dam in the Colorado Basin is formally completed. The \$119-million Davis Dam winds up a program for harnessing the lower reaches of the Colorado that began with the Hoover Dam more than 20 years ago.

Radcliffe's Management Training Program (BW-Oct.11'52,p70) for women will be extended at least through June, 1954, trustees of the school decided. Harvard Business School offered to help out by guaranteeing any deficit over and above that already budgeted.

Six big coal mines and some smaller ones in East Kentucky's coal fields have shut down in the past 2½ months and put thousands of miners out of work. Coal operators shove a large part of the blame on John L. Lewis' latest wage boost, claim it's no longer profitable to mine and ship the coal.



Ready-Mix plants now tailor-make CONCRETE to suit your needs!

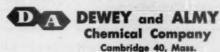
Just name your requirements? A batch of concrete for your garage floor. Thousands of tons for a building, bridge, highway or dam. The fast-growing Ready-Mix Concrete industry will deliver it — each load custom-tailored to the needs of the specific job.

As a result, the industry can produce concrete that is more versatile and durable than ever before; that offers amazing resistance to damage from freezing, sea water, de-icing salts, and sulfate.

One of the important tools that enables Ready-Mix plants to achieve these benefits is DAREX AEA — an air entraining agent that creates billions of tiny bubbles in each cubic yard of concrete. Air created and controlled in this manner makes concrete more durable; makes it pour

more easily; gives it better surface texture; keeps it free from honeycombing and gravel streaks, DAREX AEA, a Dewey and Almy product, is used world-wide in more concrete than any other brand of air entraining agent. For your next construction program, ask your local Ready-Mix concrete plant about air entrained concrete... concrete made with DAREX AEA.

DAREX ALA, the only air entraining agent that offers both catalytic action and close, error-saving control of air entrainment, is a result of Dewey and Almy research in the chemistry of small particle dispersions...a continuing research program that has brought benefits to almost every industry, through such varied Dewey and Almy products as: CRYOVAC process for food packaging; flowed-in gasket compounds; dipped rubber products; sealing compounds; adhesives; organic chemicals; shoe products; textile printing products; soda lime.



Plants and sales offices throughout the world



HOW INDUSTRY SLASHES HANDLING COSTS

Savings in materials handling, with electric trucks, are truly amazing. Money savings in excess of 50% are frequently reported. More tonnage is being handled per hour, and with greater safety. Through higher tiering, warehouse capacity is increased. Valuable manpower is made available for other jobs. Many of these trucks are powered by Exide batteries.

There are dependable Exide batteries for every storage battery need. They are used

not only to power battery-electric trucks, but also mine locomotives, trammers and shuttle cars. Railroads use them for diesel locomotive starting, car lighting, air-conditioning, signal and communication systems.

Exide batteries are used by telephone, telegraph and cable companies... electric light and power utilities... radio and television stations... ocean, river and harbor vessels... municipal fire alarm and police telegraph systems

...more than 250 different applications in all. And on millions of cars, trucks, tractors and buses, they daily prove that "When it's an Exide... you start."



"Exide" Reg. Trado-mark U.S. Pat. Of.

1888... DEPENDABLE BATTERIES FOR 64 YEARS... 1952

THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia 2 · Exide Batteries of Canada, Limited, Toronto

WASHINGTON OUTLOOK

WASHINGTON BUREAU DEC. 20, 1952 Eisenhower policies affecting business now are beginning to firm up. Decisions are being made at headquarters in New York. But details of the programs will await the inauguration itself, just one month away. Meantime, the men picked for key jobs give some clues to what's ahead.

A BUSINESS WEEK

A heavy foot on the inflation brake is indicated by the appointment of W. Randolph Burgess to the Treasury. Burgess, a banker (page 70), will be a deputy of the Secretary of the Treasury in charge of debt management.

Burgess thinks Washington has fed inflation unnecessarily. He feels that a higher proportion of the huge national debt should be in long-term bonds held by institutional investors. And he's opposed to high-level support of the government bond market by the Federal Reserve—except in an emergency. Now he will have a chance to try his ideas.

A further tightening of credit and higher interest rates may be ahead. Certainly the Eisenhower staff, as now constituted, gives no indication at all that it wants to continue the "easy money" policy of the New and Fair Deals. The big weakness in the Democrats' monetary policy long has been considered to be the willingness to feed inflation at the bottom with big spending and easy credit and then try to fight it at the top with price and wage controls. So in the months ahead you may well see credit tighter for such things as business financing and home buying.

But Eisenhower's promise is economic stability. Thus while he's committed to fight inflation and prevent still more shrinkage of the dollar, he's also committed to fight deflation and prevent a recession.

So note Marion B. Folsom's appointment (page 70). He will be in the Treasury as Under Secretary. He's from Eastman Kodak and the "liberal" side of business—the Committee for Economic Development. His background is revealing.

Folsom has worked with Congress on anti-recession plans. His big job in the Treasury will be tax policy. Eisenhower promised that if a recession threatens, he would mobilize the resources of private industry, federal, state, and local governments to combat it. Folsom fits into this.

Eisenhower will cut the budget, force economies. That prediction comes from within Truman's Budget Bureau, where his spending experts have been meeting with Eisenhower's spending man, Detroit banker Dodge.

Truman's budget for 1954, the year starting next July 1, will be close to \$80-billion. He will send it up early in January. (The law requires it before Jan. 20, the date Eisenhower takes over.)

The 1954 budget will be tighter than the current one. Last January Truman scheduled \$85.4-billion of spending, with a \$14.4-billion deficit. This has been revised several times. There's considerable speculation currently that spending for the 12 months ending June 30 will be only slightly over \$75-billion, with a deficit of some \$6-billion. Truman scheduled more than can be spent.

The GOP Congress thinks in terms of \$70-billion for 1954. That seems on the low side—unless the defense program is stretched out more than is now indicated. Still, chances for a substantial cut are good. Eisenhower may be able to keep spending in the \$75-billion class.

WASHINGTON OUTLOOK (Continued)

WASHINGTON BUREAU DEC. 20, 1952 The new president will make an early decision on taxes—whether to let the excess-profits tax expire June 30 and drop individual-income rates a notch at the end of the year. He has told callers that it is important to let Congress know just as soon as possible.

Congress is divided on the issue. There's strong sentiment to delay any tax relief until the budget has been balanced. That won't be in 1954. But there's also considerable feeling that with defense nearing its peak, some tax reduction is desirable to stimulate the economy. It's an issue on which Eisenhower probably can write his own ticket.

The farm problem may turn up in a big way next year, unless the weather kills what now looks like a long list of surpluses.

Production this year is high. So the major crops, such as cotton and wheat, verge on surplus. Prices are soft, down from last year. On the average, the farmer is back where he was before Korea.

The outgoing Democrats will set the 1953 crop goals. Secretary of Agriculture Brannan will call for some cutbacks in acreage. But compliance will be voluntary. The result may be another year of big crops, with price-depressing surpluses. Eisenhower has backed 90%-of-parity supports for two more years. Unless he's willing to spend billions in propping up markets, his Secretary of Agriculture Benson will be forced to back production controls next fall.

Private interest in atomic energy is on the rise. The reason is that atomic-fueled electric power is in sight—no more than 10 years in the future. So electric utilities, industrial equipment makers, and chemical firms are showing a sharp interest. They want to get in on the ground floor. But that will take a revision of the law to loosen up on secrecy. Congress will consider the problem early next year, and the prospect is that it will yote a relaxation on security (page 140).

Brownell will inherit some antitrust hot potatoes as Attorney General. The Justice Dept. has rushed out with cases against hig industries—petroleum and soap, for example (page 53)—without being too sure of its ground. That will put the Republicans on a spot: No matter if the cases are weak, the GOP can't drop them without facing charges from the Democrats that Eisenhower favors the trusts.

Eisenhower left the door open to a tougher war in Korea. Comments after his return make it clear he wants no broadening of the Far East war. But he also made it clear that the U.N. forces should retain freedom of action—"to impress by deeds... executed under circumstances of our own choosing." Intensification of the war might well make new and bigger demands on business.

Truman pressured DiSalle into the stabilization job. The ex-price boss will merely try to keep the wage-price machine from falling completely apart before Jan. 20.

Taft may yet end up as the Senate GOP leader. Sen. Carlson's statement that he was for Taft, made after a visit with Eisenhower, took some of the wind out of the sails of the anti-Taft faction in the Senate. And the assurances that Eisenhower won't attempt to influence the selections add to the prospects for harmony in the party.

nd the creation of the world. in the sing God created bearen & earth, the Mountain and standard & nine/y-nine; For a rese floody two thousand, nine hundred & fifty-seven; a the blette of Adraham, two thousand, and hurithred & tong roun the association of King Dhvid, one thousand & thirty-two

In the strip with week according to the prophecy of Danies; to the one handred & ninety-fourth Olympinis ha the short times have fred & Sity-two

In the Inty-section year of the empire of Octavian Abstration, the whole world was at peace;

the the shall age of the world,

JESUS CHRIST, eternal God, and San of the sternal Father, and the beam in Betheless of Justs, turning had top such of the Virgin II

Hilton C Hotels

PLASKON.

Firestone

Velon

Brunswick

Names Known to Millions...



ELECTRIFIED

Plants Division to design, build and equip their highly-efficient

SYNTHETIC RESINS PLANTS

These firms are indicative not only of leadership in their fields, but of the wide experience Blaw-Knox can apply to the varied mechanical and chemical problems involved in each instance.

And Synthetic Reains are just one of the many products for which Chemical Plants Division designs, engineers and equips complete, ready-to-run plants of proved efficiency.

CHEMICAL PLANTS DIVISION

BLAW-KNOX CONSTRUCTION COMPANY

PHTSBURGH . TULSA . NEW YORK . PHILADELPHIA CHICAGO . BIRMINGHAM . WASHINGTON, D. C.







NEW PRODUCTS like Servel's refrigerator, and new versions of old products, hit the market in 1952. That's . . .

How Appliance Makers Boost Sales

Two of the most effective ways of jacking up sales, appliance makers agree, are (1) to develop a new product, and (2) to put new gimmicks and new styling into an old product. Six months ago, when the appliance industry was beginning to climb out of a year-long slump, manufacturers started to do both (BW-Jun.28'52, p27). They had spent the slump year designing and planning; now was the time to set the gears in motion.

As a result of their efforts, 1952's dollar volume has climbed far enough so that it will probably finish ahead of 1951's. Most of the recovery has been brought about by the second formula—changes in existing products. But new products have had a good deal to do with it, too.

To get an idea of what has been going on, take a look at some of the developments.

I. New and Hot

A few companies have come through with new products that have set the industry on its ears. For instance:

Servel, Inc., last week introduced its new refrigerator, the Ice Maker. The Ice Maker licks the perennial problem of how to get ice cubes out of trays; it eliminates the trays. It freezes the ice in half-moon shapes, dumps them into a basket (picture). The line will be ready to sell in early 1953; prices range from \$399.95 to \$599.95.

Bendix Home Appliances division, Aveo Mfg. Corp., two weeks ago brought out its Duomatic washer-dryer unit to retail at \$499.95 (BW-Dec.6 '52,p52).

Elna Sewing Machine Co. just brought out an automatic portable. This machine, of Swiss make, has plastic disks that guide the home sewers' needle to perform the zigzag stitch (in which the needle moves sideways for fancy stitching). Price of the new Supermatic is \$289.

 To Come—Some big companies have other developments on the fire. They aren't talking about them just yet, but these new products will be announced shortly:

York Corp., it leaked out a week or so ago, has a room air conditioner that will both heat and cool a room. Units that will do this have been on the market before—Fedders-Quiggan and Mitchell both have them—but the York unit is something special. It works on a reverse-cycle system that operates on the heat-pump principle (BW-Feb.2 '52,p21).

Westinghouse Electric Corp. is going to announce something hot in

the way of kitchen equipment soon. General Electric Co. has new ideas for radiant heating.

Radio Corp. of America—looking further ahead—has demonstrated the use of transistors to replace tubes in television receivers and radios.

II. Not New-But Strong

Mainly though, appliance manufacturers have contented themselves with putting some extra spit and polish on present lines—or adding to them with some variant of a product already on the market. But even here, you find some definite trends.

 Hi-Fi-Take the case of high-fidelity sound recording. A year ago this was pretty much the bailiwick of small companies, which custom-built hi-fi machines to order (BW-Apr.26'52.p48). Now more and more of the big-name companies are exploring the field.

companies are exploring the field.

Stromberg-Carlson Co. pioneered hi-fi equipment last May. Last month Hoffman Radio Corp. broke out with a combination television-radio-phonograph in several styles, priced between \$775 and \$795, retail. Last week Columbia Records, Inc., jumped aboard with a table model, to sell for \$139.50 (federal tax included).

Hallicrafters Co. has an experimental



Speed vital papers into vital hands with low-cost COPYFLEX!

Speed vital papers to your key executives via the Bruning COPYFLEX process, which reproduces an original exactly, in seconds, with no manual re-copying, and no chance of error.

With COPYPLEX you speed ... sales control reports • accounting and financial statements • inventory and production control reports • purchasing • order-invoicing • pricing • most other procedures.

COPYFLEX usually is the most economical way to make 1 to 100 copies up to 42 inches wide... averages only 2¢ per sq. ft. for all costs!

No masters or stencils are needed ... no inks to soil hands ... no negatives, tray developing, or darkroom to fuss with ... no fumes, no exhaust ducts, no special room lighting.

Mail the coupon now for the full COPYFLEX story.





COPYFLEX "50" is easy to operate, handles large velume of poperwork fast.

Dept. M122	Totorboro, H. J.
Show me COPYFLEX in co	COPYPLEX process and equipment. ction (no obligation).
Name	Title
Company	************
(treet	

hi-fi model. GE is working at it, too. · Color-Another trend a lot of companies are following is to more color. International Harvester Co. hints of big developments in this line in its new "decorator" refrigerator. I-H isn't saying much, but it does promise that the housewife will be able to get any color on the outside of her refrigerator, change the color whenever she wants. Admiral Corp. is using "glacier blue" in the interiors of its new lines; Norge fancies "ice gold," while Servel dresses up its freezer interiors with "icicle blue." Apex Electrical Mfg. Co. is showing a wringer-washer in ice blue, trimmed with dark blue. Perfection Stove Co. is dressing up its new models in what it calls a Tuxedo Top-black and white. Royal Vacuum Cleaner Co. has an upright cleaner with a handle that looks like hammered aluminum.

 New Shapes—Other companies are turning out tried-and-true products in new shapes. For instance, take the sudden spurt of the canister-type vacuum cleaner, of the sort that Lewyt Corp. popularized. Apex brought one out for the first time this year. GE and Eureka (Eureka Williams Corp.)

both have it. Even more astonishing to trade observers is the growth of the upright freezer. This seems to be a direct outcropping of the food-freezer plans (BW-Apr.12'52,p30). Kelvinator division (Nash-Kelvinator Corp.), Bendix, Admiral, Norge division (Borg-Warner Corp.) are all making uprights. Thor, which is bringing out a new chest model now, will have an upright next spring. "Deep-freeze" Appliance division of Motor Products Corp. has its version. · Lines-The trend to go full line is still strong. Maytag Co. has added a dryer, RCA gained gas and electric ranges when it bought Estate Stove Co. some weeks ago. And the air conditioner is blooming all over the lot. Hotpoint Co. has just announced a conditioner and dehumidifier.

III. What's the Rush?

So, though there's a scarcity of really new appliances, there's plenty of motion and commotion in the industry. Several motives prick the manufacturers on: the hope of tapping the new market, especially as more new homes go up; the need to round out nearly saturated lines with newer appliances; the big lure of the replacement market. Probably the strongest spur of all is the dread that the competition will get there, if not first, with the mostest.

The reaction to Bendix's new Duomatic sums up the situation. Now that it's out, almost everyone in the business is working overtime, trying to rush equivalent products through engineering and design, and into production.

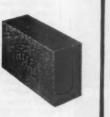


Those bells that ring out Yule...the electric train under the tree...the piles and piles of packages—most everything we enjoy at Christmas owes its origin, in part, to refractory brick.

Without refractory brick to line the furnaces of industry there would be no heat, light or power, no paper, no metal, no manufacturing, no transportation.

Next to agriculture, there is no more vital contribution to the economy of our nation than such heat-resisting refractories products as those made by Grefco. From Grefco mines and plants—here and overseas—General Refractories Company is supplying brick, mortars, plastics and castables to serve our nation in times of peace and in times of problem.

●At this time of year let us hope it will be peace. But whatever problem we must face, let's make sure American men and American industry are ready to measure up!



General Refractories Company

PHILADELPHIA

Men's Formal Dress Is Back-With a

Washington, D. C., Reports:



Washington has never been a "formal conscious" city, except for the diplomatic corps, the usual "high society," and a few annual affairs such as the Gridiron dinner, the November sub-deb cotillion, the annual White House functions. Once in every four years there is the inaugural ball.

Before World War I, the diplomatic corps was very strict in the matter of formal attire. At diplomatic functions a man wore white tie and tails or the dress uniform of his country with all his medals, ribbons, and decorations. Practically all of the countries required their ambassadors and attaches to have the appropriate dress uniforms although they are very expensive and were paid for by the individual. But today there are very few white tie occasions—black tie is worn at the majority of the diplomatic functions. State Dept. comments that the airplane has wrecked formal wear—people just can't carry enough extra luggage to allow for the articles of attire needed.

Mrs. William Randolph Hearst, who writes a society column under the name "Austine," says the smart set—or the elegant set—usually wears black tie after 7 p.m. She says Washington is definitely becoming more formal conscious, but that it doesn't come up to the peak it reached before World Wars I and II. Then, if a hostess sent out an invitation without mentioning attire, it was assumed that it was white tie. Now if an invitation is sent out in that fashion it is taken to mean not to dress. However, a few hostesses of the old school still maintain it means full dress.

Mrs. Gwendolyn Cafritz, who has been Washington's No. 1 hostess since Perle Mesta left, says that black tie is automatically worn after 7 p.m. If an invitation does not specify, it is understood that black tie will be the prevailing dress.

Everyone talked to agrees that men are becoming more conscious of formal wear. Men's formal wear is so designed to cover a world of sins (like nail polish for a woman) and after he finds out how handsome he looks it's not too much effort to get him into the same garb again.

Men's formal wear is making a comeback. This year at New Year's Eve parties, at country club dances during the holidays, and throughout the winter at business dinners, an increasing number of men will be wearing black ties.

That's the trend all over the country. In Detroit, retail sales of dinner jackets are 25% over last year; clothiers in Los Angeles report increases of 30% to 50%; and leading formal wear manufacturers in New York say that although their output is below prewar level, they are enjoying their biggest year in a decade. At a Shrine dinner dance in the South last month—dress optional—90% of the 400 men wore tuxedos; at a similar affair two years ago, only 15% did more than shine their shoes and put on dark business suits.

 Modified—Right now, the return to dressier clothes is far short of the boom stage, and it's not up to prewar standards. A few cities report that the return is barely noticeable. Still, from most metropolitan areas the word is that there's a comeback—but it's a comeback with a difference.

To the businessman, who has fallen in step with the national parade toward more casual living, any return to formality would seem to be a paradox. The fact that bankers now wear buttondown shirts, that Chesterfields are rarely seen on the 8:15, that Saturday night hosts wear sports jackets, slacks, and loafers, hardly creates an atmosphere for formal clothes.

Actually, there is no paradox. Formal evening wear, in its latest appearance, is really just a step beyond the dark business suit. The starch has been taken out and color added. Men seem to be in the mood for broadening their wardrobes—but without the spit and polish. Wearing today's dinner jacket is not a matter of dressing formally; it's a way of putting the male on display—without making him too uncomfortable.

• You're In!—Far and away the most popular thing in formal wear these days is a lightweight, single-breasted, midnight-blue dinner jacket with a shawl collar and satin lapels. The jacket is worn with matching trousers and either matching or black accessories—that is, cummerbund, bow tie, and socks. The shirt is semi-soft, with a pleated bosom and a soft, turndown collar. Patent leather shoes are as extinct as derbies; regular, plain black shoes will do.

Of course, there are variations: Some men look terrible in a single-breasted suit. If they wear the double-breasted dinner jacket, it usually has peaked

Difference

lapels, and no cummerbund or vest is worn. In either case, the black jacket is acceptable, although midnight blue is the most popular shade at the moment. So far as outerwear is concepted are as you please.

cerned, go as you please.

• Ground Rules—A few local fashions have cropped up, but none has spread very far. The silk, midnight-blue tux is moving well in Houston. Plaid evening jackets are common at college dances im—of all places—Boston. And in Los Angeles, one retailer has had some luck selling a white tux jacket and dark brown trousers. The same fellow tried to introduce a moss green formal two years ago, but it didn't take.

The biggest difference in the tuxedo, however, is not in local ground rules or in the return of old styles-like the shawl collar. It's the use of lightweight

fabrics.

Fifteen years ago, heavy, 16-oz. fabrics were used for the dinner jacket, and men at dances and in airless night spots really suffered. Today, the idea is to make a comfortable, loose-fitting, lightweight garment. S. Rudofker's Sons, a Philadelphia concern that makes at least half of the country's formal wear, is using a 10½-oz. fabric for its dinner jacket.

The lightweights seem to be driving the old heavies right out of the market: A Memphis dealer found he had to unload his inventory of 16-oz. suits at 50% off. A midwest retailer describes the tropical weights as the "biggest change in men's formal wear in 40

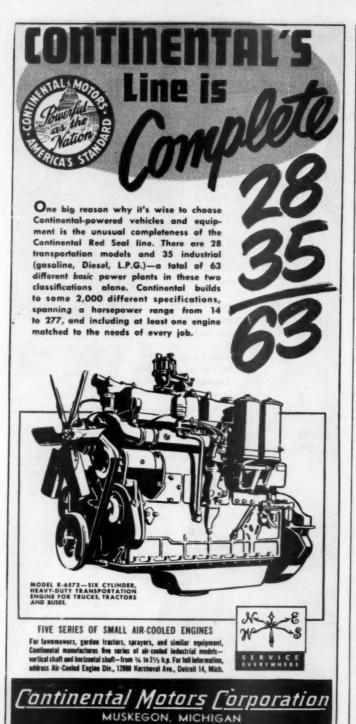
vears?

But it took more than the introduction of a comfortable garment to stir up interest in dressing up. The answers seem to be the same for almost every city: pressure from women, and prospecity.

• The Women—A Richmond (Va.) hotel man says: "The ladies always want to dress, and they're making the men see it their way." For a long time after the war men could wear a conservative dark suit when the gals were in formals but, as the fashion editor of the Los Angeles Times says, "they can't get away with it any more." Still, women ordinarily have had little success in getting their husbands to buy new formal clothes, unless there was plenty of money in the bank.

• Prosperity—That's why prosperity makes such a difference to the makers of formal wear. High-income groups buy dress clothes whether times are good or bad; their demand on the market is steady, but it's small. The reasons for today's pickup in the market is that the mass of tuxedo buying comes from another source: the middle-





"... we got just as sloppy as we could ..."

FORMAL WEAR storts on p. 44

income group and its college-age sons. In an earlier era, this group might have acknowledged prosperity by wearing more full-dress suits. Today, the middle-income group accepts the 1952 prosperity in what seems to be an appropriate fashion: a mild return to the dinner-jacket. They leave more formal dress to debutante balls and society weddings—for which a high percentage of suits of tails and cutaways are rented. A vice-president of one of the country's oldest and most reputable clothing houses admits that if he were invited to a formal afternoon wedding, he'd have to rent a cutaway.

From around the nation come additional reasons for the tuxedo comeback. Texas reports: "Now that the wealthy class is putting on a little age, and is beginning to have more time to contemplate the things money can buy, there is a decided trend toward more formal wear; in the evenings, more and more tuxedos are being worn for parties at country clubs and in private

homes."

A Los Angeles suit manufacturer calls it a natural swing of the fashion pendulum. This manufacturer says: "We got just as sloppy as we could, and now we are swinging back to more neatness

and formality."

• Summer Fashion—Prosperity means that more people are getting to country club dances, going to the opera or concerts, and doing things where formal clothes may be worn. It also means that more people are taking cruises and going south for winter vacations. The result is a sizable jump in the summer dinner jacket market. Rudofker's, which made 90,000 summer jackets in 1947, made about 150,000 this year. Here are the fashion trends in warm weather

According to Men's Wear magazine, the whites and off-whites sold next year will be equally divided between single and doubled-breasted-both with shawl

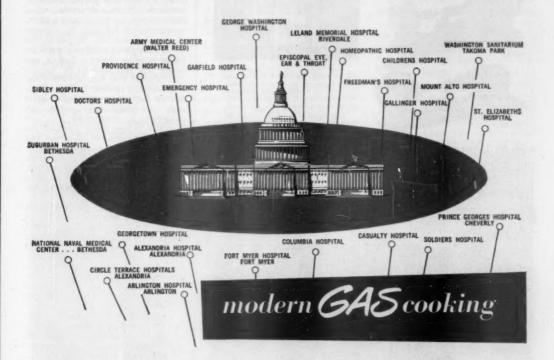
collars.

In Chicago, white jackets are especially popular. One store sells them three-to-one over winter tuxedos. The reason they give: Winter formals have a short season, while summer formals are worn from spring until fall, and on winter vacations to boot. The trend is away from rayon-and-acctate blends, and towards blends containing Orlon and Dacron.

But some sources feel that the white jacket comeback has reached its peak, that it will eventually be replaced by the midnight-blue, tropical worsted, all-season tuxedo. Some southern mer-

Unanimous choice

in Washington, D.C. Hospitals



Long experience satisfies Dicticians, Food Supervisors and Hospital Administrators that GAS has no equal for clean, efficient volume cooking.

It's by choice—not by chance—that every hospital in Washington and its adjacent areas of Maryland and Virginia uses GAS for cooking. Executives of the city's new, most modernly equipped hospitals are in unanimous agreement with those of Washington's older institutions on the many important reasons why GAS has been their selection for food preparation and service.

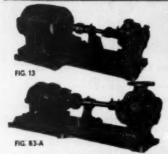
One of the important reasons is the modern, streamlined compactness of Gas Cooking Equipment which fits into any type of kitchen, large or small.

Another reason is the fast action obtainable with modern Gas Cooking Equipment—high-speed deep-fat frying, broiling by blue flame which seals in natural juices and vitamins, instant on-off heat for top-burner cooking. But this same efficient Gas fuel, under precise automatic control, permits slow roasting of meats and poultry in constant-temperature ovens so that every pound of raw meat produces the maximum number of generous cooked servings.

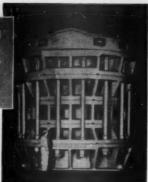
Dieticians, food service administrators, and other hospital officials in metropolitan Washington, as well as in other cities coast to coast, will cite many additional vitally important reasons why GAS is best, by any standard of comparison, for every cooking requirement. They're important reasons, too—and your Gas Company or your kitchen equipment specialist will be glad to sum them up quickly for you.

AMERICAN GAS ASSOCIATION 420 LEXINGTON AVENUE, NEW YORK 17, N.Y.

3 - Story Nordberg ORE CRUSHER Lubricated with VIKING PUMPS



The Viking direct connected lube oil pumps assure positive lubrication at all times.



This "Symons" primary gyratory ore camber weighs well over 1,000,000 pounds and is the largest one in the world. Built by Nordberg Manufacturing Company, Milwaukee, it will be used by Climax, Molybdenum Company, Climax, Colorado.

Lubrication of this huge crusher depends upon 3 Viking Pumps with combined capacity of 118 gpm. Twelve-smaller crushers in the installation require 12 additional Viking Pumps.

If your equipment requires lubrication in either large or small capacity, lears how Viking Pumps can meet your needs. Write for bulletin series \$3\$.



VIKING PUMP COMPANY · CEDAR FALLS

THE ORIGINAL "GEAR-WITHIN-A-GEAR" ROTARY PUMP

Synthetic Rubber Industry Increases Output with





Reactors Cooled With These Frick Coils Make Rubber Twice as Fast.

Refrigeration

The big plants making synthetic latex at Baton Rouge, La., Naugatauk, Conn., Louisville, Ky., and Borger, Texas, have lately installed special Frick cooling systems for holding critical temperatures in reactors—in such remarkable fashion as to more than double their output! The adventages of "cold" rubber are thus made more available to everyone. Whatever the cooling problem in your business—air conditioning, ice making, quick freezing, or process work—you can rely on Frick refrigeration to solve it with dependability.



Also Builders of Power Farming and Sawmill Machinery

"... few ... think that the full-dress suit will come back ..."

FORMAL WEAR starts on p. 44

chandisers are all ready preparing for a dark-tux summer.

• The Cycle-Styles in formal wear have always followed a cycle that pivots on wars and general economic conditions. In the 19th century, when class structure was much more evident, society donned full dress for virtually all after-dark functions. In general, the rest of the country simply did not wear formal evening clothes. And it was society that gave birth to the tuxedo. At a Tuxedo Park ball in 1886. Griswold Lorillard shocked the Four Hundred by showing up in a tailless dress Cleveland Amory recalls the coat. incident in his recent book, The Last Resorts. Where young Lorillard got the idea is a matter of conjecture, but Amory supplies one possible answer from a Lorillard of a later generation. "I've always heard," says Louis Lorillard, 'that they just got tired of sitting around on their tails, so they cut them off.

Tuxedo Park contributed its name to the tailless coat, but society shied away from it until World War I. It was proper to wear it only at stag affairs, never where ladies were present. But when the men came back from France, in 1919, tailors found that the full-dress suit was hard to sell, and in the early twenties, with a business recession at hand, men wore the tuxedo—women or no women. Clothiers tried to promote a compromise, a white vest with the tuxedo when ladies were present, but the idea never really caught on. Then came the bull market, a spread of affluence—and a return to full dress.

· Rounding Out-The depression was another blow to formality, and perhaps the beginning of the final decline of the full-dress suit. At a dance at a Princeton eating club in the early thirties-traditionally a white-tie affair-the tuxedo was as prevalent as tails. Just before World War II, there was a feeble return to full dress, but it didn't reach far below society ballrooms. The war delivered the coup de grace to strict formality. Returning veterans had little money to spend on clothes. If they did, it was for conventional business suits. Dress on the G.I.-crammed college campuses reached an extreme of informality.

Now, the cycle suggests that there should be a return to formality. However, few—if any—observers think that the full-dress suit will come back. The few suits of tails that are being made go to rental houses.

Free enterprise at work

An example of how a new machine tool opened up new fields for a Southern manufacturer

TO A SMALL BUSINESS in Columbus, Georgia, the term "Free Enterprise" is anything but an empty phrase.

The Goldens' Foundry & Machine Company had been machining a low profit item solely as a service to their customers. Their management had almost decided to discontinue this item when they heard of a new machine tool that would produce the job

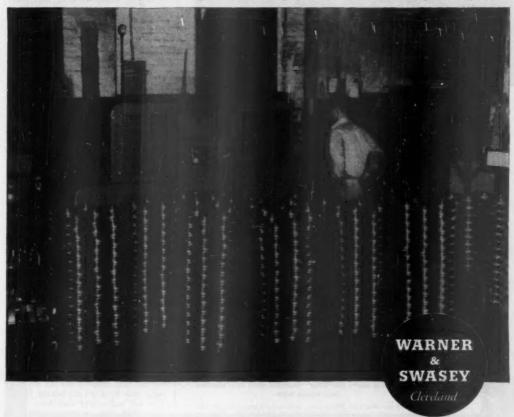
with a great deal more efficiency. So they dug into savings and bought the machine—a Warner & Swasey 1-AC Single Spindle Chucking Automatic.

The 1-AC greatly increased production at once—with accuracies of .0006" on important boring operations! This performance record of the new machine made it possible for Goldens' to bid on a big job for their shop—an 8000-

piece run of high priority pulleys requiring short delivery. They produced the job quickly—then went on to handle more work than ever before.

Everybody has benefited. Customers are even more satisfied . . . operators like the ease of operation . . . investors are realizing new profits. And more work and more machines are in Goldens' future.

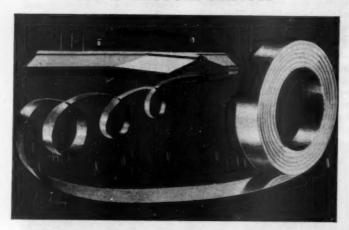
That's the story. But it's not an unusual one. They happen every day in work shops all over the country—continuing examples of how Free Enterprise really works!



FOLLANSBEE COLD ROLLED STRIP

FOR

CUSTOM-QUALITY
WITH CUSTOM-SERVICE



For your strip requirements for any type of production—specialty or run-of-mill—you may use Follansbee Cold Rolled Strip with complete assurance. It is rolled, tempered and supplied to your specifications. Follansbee Cold Rolled Strip provides a continuous supply of uniform steel from coils to your automatics, regardless of forming operations involved.

Follansbee Steel Corporation is set up to supply you with quick, direct, personalized service.

Consult your trained Follansbee Steel representative; He will be glad to discuss your fabricating problems with you.

FOLLANSBEE STEEL CORPORATION



GENERAL OFFICES, PITTSBURGH 30, PA.

POLISHED BLUE SHEETS AND COILS SEAMLESS TERME ROLL ROOFING
COLD ROLLED STRIP

Sales Offices—New York, Philadelphia, Rochester, Cleveland, Detroit, Milwaukee. Sales Agents—Chicago, Indianapolis, Kansas City, Nashville, Los Angeles, San Francisco, Seattle; Toronto and Montreal, Canada. Milis—Follansbee, W. Va.

FOLIANSBEE METAL WAREHOUSES Haburgh, Pa. Rechester, N.Y.

Fairfield, Conn.

Early Showing ...

. . . of the jewelry industry's spring lines brings a flock of orders. It may end seasonal ups and downs.

Providence jewelry manufacturers tried a new marketing stunt this Thanksgiving that may change the industry's selling pattern.

They staged a two-week show of spring lines for the benefit of wholesalers. The trinkets were spread over two whole floors of the Sheraton-Biltmore Hotel.

The wholesalers showed up from all parts of the U.S., South America, Cuba, and even Malaya. What's more, they signed enough orders to keep the industry producing at a good clip straight through January and February. Ordinarily, manufacturers have to lay off about a quarter of their work force after Christmas.

Manufacturing Jewelers Sales Associates, who sponsored the show, thinks it may result in a new sales approach in the industry. If that's so, sharp production peaks and valleys will be flattened.

• Smoothing Production—For years jewelry has been sold this way: Plants get out their spring samples in January and February. Salesmen carry the lines around to wholesalers and retailers. Production is at a low in these months, doesn't pick up until orders begin to trickle back to plants early in March. Then there's a production push for a few weeks, and another dip in May.

The process repeats in July, when salesmen hit the road with fall and Christmas stuff. Orders get back to the plants about August.

Under the new plan, manufacturers bring out their spring samples in November while they're still pressuring out stuff for Christmas. In late December and January, they shift production over to spring goods.

Sales Associates plans another showing on fall and Christmas lines early next summer—to bridge the lull between spring and fall production seasons.

spring and rain production seasons.
•Wide Range—At the show just closed, buyers represented every price range. Each class of distributor bought well across the price range. Manufacturers think this indicates that the well-defined price gap between costume and high-grade jewelry is closing.

The across-the-board buying reflects the fact that anybody can sell anything right now to a jewelry-buying public. This fall and winter they have had a boom that, they say, tops anything in the past. With the new show bringing in orders, the jewelry makers are carrying the boom into spring.



F-86 Sabre Jet

NORTH AMERICAN AVIATION, INC.

NORTH AMERICAN HAS BUILT MORE AIRPLANES THAN ANY OTHER COMPANY IN THE WORLD



WINTER COMES TO LOS ANGELES: Downtown Businessmen's Assn. rigs up skating rink in Pershing Square—the latest attempt to lure shoppers downtown.



SANTA ON SKATES made an opening-night hit with sun-andswim nurtured Angelenos. There's to be no public skating in Pershing Square; the rink will feature . . .



DAILY EXHIBITIONS by professional and amateur skating clubs. As crowd-pullers, the businessmen's association plans fashion shows, hockey, figure skating by . . .



TINY SKATERS like this seasoned tot who is signing a release so that businessmen won't have to pay damages in case she stubs her toe.

Easier Skating for Downtown Stores

This week merchant-members of the Los Angeles Downtown Businessmen's Assn. held their breath as they eyed the crowds watching an unfamiliar sight-ice skating on a 40-ft.-by-60-ft. rink in Pershing Square. It was their latest attempt to coax shoppers downtown.

Like downtown stores everywhere, Los Angeles retailers had tried all the usual gimmicks to stem the snowballing trend toward suburban shopping. They stayed open nights, offered free parking, shouted their shop-downtown pleas over the radio. It wasn't enough. The merchants in the association decided that what they needed was a crowd-puller, something dramatic to build up traffic downtown.

The trick they hit on was to bring a winter theme to southern California by rigging up an ice skating rink right in the center of town. They figured that there aren't many ice skaters in tepid Los Angeles; probably a lot of Los Angelenos have never seen a pair of skates.

There won't be any public skating at the Pershing Square rink. All the skating will be done by professional and amateur clubs, which will put on continuous exhibitions from 9 a.m. till 10 p. m. every day.

The association, busy counting heads, says the rink has already pulled a lot more traffic downtown. That's half the battle. It figures that once it gets the crowds downtown, the merchants are

Soap Splitup?

Antitrusters want to make each of the soap industry's Big Three break up into independent companies.

One of the legacies that the Democrats intend to leave for the new Republican administration is a stack of antitrust cases. And right on top of the stack will be the case filed last week—a whopper against the Big Three of the soap and detergent industry: Proctor & Gamble Co.; Colgate-Palmolive-Peet Co.; and Lever Bros. Co. Another defendant is the Assn. of American Soap & Glycerine Producers, trade association for the industry.

All three soap companies deny the charges with emphasis; they are set for a fight to the finish with the antitrusters.

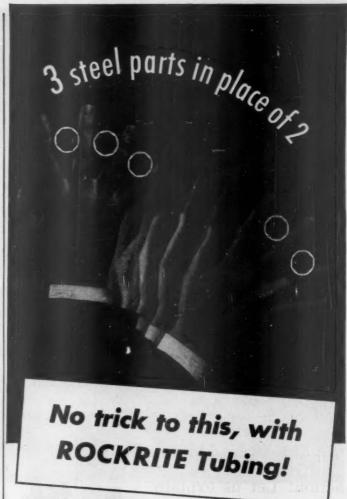
• The Case—The government charges that the companies have monopolized the household soap business for the last 20 years, prevented new producers from getting a foot-hold in the business.

The effects of this monopoly, according to the antitrusters: Housewives don't get the benefit of competition; manufacturers have been kept out of the soap and detergent industry; companies in the business have been prevented from marketing new brands; producers and sellers of tallow and grease have been deprived of the benefits of free competition for their products.

The antitrusters' proposed remedy: court orders against the practices cited, and a splitup of each of the companies into an unspecified number of independent companies.

The civil case under the Sherman Antitrust Act was filed in the Federal District Court in Newark, N. J. It will be up to President-elect Eisenhower's new Attorney General to decide whether the case should be prosecuted.

 Details—The government's complaint against the three soap producers seems to be based largely on the fact that they



Three steel parts in place of two.

That's a feat worth doing these steel-conscious days. But it's no trick with Rockrite Tubing, sized by a distinctively different process to closer tolerances than possible with any other method. Rockrite Tubing can give you:

- 50% more parts per pound of your steel allotment because more of the metal goes into the finished part.
- Up to double the output of parts from each automatic screw machine.
- A corresponding reduction in the total cost of the finished part, including tube stock and machining.

Learn more about how close-tolerance Rockrite Tubing can step up your production, step down your steel requirements for quantity production of ring-shaped and cylindrical parts. Bulletin R2 tells the full metal-saving stery.

Write for your copy today.



TUBE REDUCING CORPORATION · WALLINGTON, NEW JERSEY



Knockout blows to the

costly, tragic industrial accident menace are dealt daily by every Employers Mutuals Team, cooperating with our policyholder-owners. Lives are saved, production is improved, morale is boosted and, often, insurance costs are cut when the Employers Mutuals Team goes into action! Let us explain how you can benefit.





MPLOYERS M

Home Office: Wausau, Wisconsin

Offices in principal cities ... Consult your telephone director

Employers Mutuals write: Workmen's Compensation-Public Liability-Automobile-Group Health and Accident-Burglary-Plate Glass-Fidelity Bonds-and other casualty insurance. Fire-Extended Coverage-Inland Marine-and allied lines. All policies are nonassessable,



EMPLOYERS MUTUAL LIABILITY INSURANCE COMPANY OF WISCONSIN EMPLOYERS MUTUAL FIRE INSURANCE COMPANY

do have, between them, at least 75% of the national sales of household soap, and more than 90% of the sales of household detergents. The complaint spells out these figures to show the percentages of total national sales of household soaps and detergents accounted for by the companies:

		Soaps		
Year	PAG	Colgate :	Lever	Total
1925	. 30%	27%	9%	66%
1937	. 40	2.8	22	80
1947	. 37	19	29	75 75
1951	. 40	24	21	73
		Detergents		
1949	. 66%	20%	6%	92%
1950	. 67	15	11	93
1951	. 69	14	10	93

Because of this dominance, the antitrusters say, "no producer who has entered the household soap business since 1926 has been able to sell as much as 1% of all household soap in any year.

• Giant Killer-The government's objective, it says, is to "reestablish an environment favorable to the entry of newcomers in any industry where dominance has been concentrated in the hands of two, three, or four giants who control prices or have the power to exclude competitors.

The case is squarely in line with the case against the Big Four meat packers. This earlier case has not yet been brought to trial. As in the soap case, it will be up to the incoming antitrust chief either to continue the case or drop it. The underlying premise: that it's illegal to have a big three or big four in any industry.

Actually, the soap business is, and has been for years, one of the hottest competitive battlegrounds in industry. This is a point that all three companies stressed in their immediate reaction to the government's charges.

· Charges-The outcome of the soap case will probably depend on the ability of the government to prove that the three companies have actually been conspiring to keep out competition and to regulate competition among them-

Specifically, the antitrusters charge the companies with some 25 practices, among them:

· Dominating the trade association and causing it to assist them in their conspiracy;

· Exchanging information on prices, terms of sale, advertising and promotional programs, and other information;

· Controlling market-reporting services for tallow and grease-and then getting "confidential deals" at lowerthan-market prices;

· Acquiring exclusive patent rights controlling base materials and processes for making detergents.



Brass for Beauty

The rich, mellow warmth of brass adds beauty to the Christmas fireside. In many of the gifts, the fireplace equipment, lamps, clocks and candlesticks, brass lends durability with an extra touch of beauty. Chase Brass and Copper are chosen by manufacturers of top quality products. One reason is that Chase

inspects its metals constantly for accuracy, temper and surface quality. They are available, subject to government controls, through dealers and wholesalers across the nation and through Chase's 23 mill warehouses. Chase Brass & Copper Co., Incorporated, Waterbury 20, Connecticut.



CAME BARIA & COPPER CO., MATERIATY 20, COPM., Wardeness and Salve Offices at: -- About Alberta Ballouse Basins Discount Christop Contract Dates Descript States Co. Ma. Las Agenta Milloughes Minaments Newert South Nov Offices New York Philadelpha Philadelpha



Two significant factors in today's economy make it extremely important for you to take another look at your fire protection in the light of modern developments.

First, is the current inflationary spiral.

Second, is the trend toward more efficient utilization of buildings and equipment. Commercial and institutional properties are taxing their facilities by operating at or near capacity. Industry uses more complicated automatic machines and processes to achieve a higher production rate.

The net result of both is a record high valuation of all property
— in terms of higher investment and replacement costs, and
of higher occupancy values.

Adequate Fire Protection is essential to safeguard these values and assure business continuity.

<u>Clutomatic Sprindeder. 10-Point Fire Protection</u> is geared to meet these modern demands. It's scientifically designed to minimize property loss and business interruption resulting from fire. It starts with a survey of your specific needs, then designs, fabricates and installs exactly the right system best suited to your particular hazard. It employs the most positive, fastest-acting fire detection devices and the most effective extinguishing media.

The modern way to look at fire protection is described in "Automatic" Sprinkler's factual book "The ABC of Fire Protection". Write for your copy today.

"AUTOMATIC" SPRINKLER CORPORATION OF AMERICA
YOUNGSTOWN 1, OHIO

OFFICES IN PRINCIPAL CITIES OF NORTH AND SOUTH AMERICA

'Automatic' Sprinkler

FIRST IN FIRE PROTECTION

MARKETING BRIEFS

Janzen's sales increased 21% in the year ended Aug. 31, reaching \$26-million. This is the fifteenth consecutive year the company has broken the previous year's record. Jantzen started out with swimming suits; now sweaters and similar sportswear account for the greatest share of its growth.

Advertising volume hit an all-time high in October, according to Printers' Ink. The increase was led by TV, with jumps of 18% over September, 1952, and 18% over October, 1951. Reasons for gain: heavy political expenditures in major media; beginning of Christmas ad campaigns.

Closed-circuit TV conferences for sales promotion can't be set up overnight. Bendix Home Appliances has canceled plans for a 40-city program, set for Dec. 30, to unveil its new Duomatic washerdryer (BW-Dec.13'52,p60). Difficulties: It's a tricky job, and Bendix started making arrangements too late; also dealers have too much else to do at Christmas.

Hot coffee, served by automatic dispensers the size of office water coolers, may be the solution of the ticklish coffee-break problem. Rudd-Melikian, Inc., of Philadelphia, expects to sell 10,000 of their dispensers (the 100-cup Coffee Cub) next year. The unit is coin-operated.

Declining output continues in the men's clothing industry. Clothing Mfrs. Assn. says the industry operated at 69% of capacity from January through October. Last year it was at 73%, in 1950 at 85%, for the same 10 months. Men's growing fondness for sportswear is reflected in a production jump of 14% for separate pants and a 7% decrease for suits.

Government workers who fear loss of their jobs after Jan. 20 are the target of ads run by Phillip's, one of Washington's biggest TV and appliance dealers. The chain promises to accept the return of—with full refund—any major appliance bought before Christmas, if the buyer loses his job before next July by reason of the change in administration.

Air conditioning and prefabricated homes have been tied together with the signing of a contract between the Carrier Corp. and Gunnison Homes, Inc., U. S. Steel prefab housing subsidiary. Year-round air conditioning will be available in the \$7,000 to \$12,000 range of homes.

Another Industrial Leader... Willard Storage Battery Company chooses LURIA Standardized Buildings

Architect: H. F. Everett & Associates, Allentown, Pa.

LURIA puts the speed and economy of STANDARDIZATION plus the adaptability and flexibility of CUSTOM-BUILT STRUCTURES

into your expansion program

Combining laboratory, production line and warehousing, the new 130,000 square foot, multiple-unit Willard Building in Allentown, Pa., exemplifies the adaptability and flexibility of Luria's standardized structures. There is practically no limit to the way Luria units may be combined! As for permanence—Luria Standardized Buildings are designed to meet the most stringent building code requirements. So for the speed and economy of standardization—standardization that fits your needs—contact your Luria representative today.

LURIA ENGINEERING COMPANY

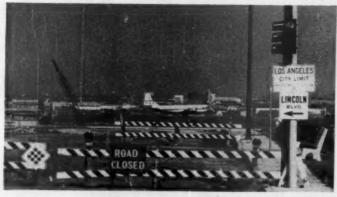
SOO FIFTH AVENUE, NEW YORK 26. N. Y.

District Offices: ATLANTA . PHILADELPHIA . BOSTON . CHICAGO . WASHINGTON, D. C.

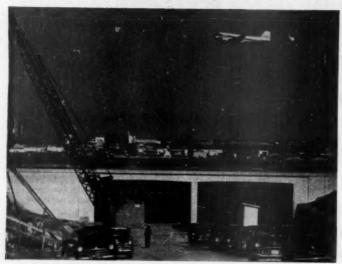
LOCAL BUSINESS

Business by and large is a local affair, and local news takes a large place in every businessman's thinking.

Here, from a sampling of cities around the country, are some of the local events that made news last week.



Pushed Around by Airport . . .



... Boulevard Goes Underground

LOS ANGELES—Throughout the country many airports are skirted by roads, often by major highways. When the airport is expanded, or the runways lengthened, it has become almost standard procedure to move the road. Sometimes the process can be carried too far. Sepulveda Blvd., a heavily traveled

north-south traffic artery, skirts the western edge of Los Angeles International Airport. It was moved westward in 1929, when the runways were lengthened from 2,200 ft. to 4,660 ft.; again a couple of years ago when the runways were stretched to 8,500 ft. Total shift for the boulevard was more than a mile.

Now 12,500-ft. runways are planned; they would mean pushing Sepulveda a mile further.

But city planners decided the boulevard had been pushed far enough. Their solution: a 1,910-ft., six-lane tunnel (pictures) to carry Sepulveda Blvd. under the airport. This isn't the first such grade-crossing elimination—a two-lane feeder road at New York International Airport tunnels under the main runway but it's the first time it has ever been done with a major traffic artery.

Schizophrenic Hotel

COLUMBUS, OHIO—This city's biggest hotel—the 1,000-room Deshler-Wallick—may be split right down the middle as the result of a court fight between the owners of the two buildings that house the hotel.

The 400-room Deshler was built in 1913. In 1929 the LeVeque-Lincoln Tower was built across the street, and, as part of it, the builders put in a 600-room hotel. They connected it to the Deshler by overhead passageways across the narrow street between the two. Since then, the two have always been operated as a single hotel, although they have always been separately owned: The owners of the Deshler have leased the Wallick from the owners of the tower. Because the Wallick was planned to be operated as part of the Deshler, it has no separate entrance, no lobby, no adequate banquet room of its own.

This unusual arrangement worked fine for many years. But in the middle of 1951, the owners of the Deshler filed the first of a series of suits against the owners of the Wallick, charging failure to furnish upkeep, repairs, and services required by the lease. The Wallick owners filed a series of counter suits. In July, 1952, the Deshler owners canceled the lease and sued for \$300,000 damages. The Wallick owners countered by:

 Asking the court to appoint a receiver, charging the hotel management with siphoning off profits to avoid paying \$291,000 in rent:

• Getting a temporary injunction to prevent the Deshler owners from abandoning the Wallick.

Hearings on the suits are under way this week. In the meantime, Columbus has lost several major conventions as a result of the uncertainty over hotel accommodations.

Roofers on the Carpet

DETROIT—Some 15 of the largest roofing companies in the city were indicted by a federal grand jury last week for violation of the antitrust laws.

The Justice Dept.'s Antitrust Division asserts that the 15 companies, which do more than 70% of the \$10-



Merry

RISTMAS

May your holiday be merry and bright . . . yes, bright with the pleasure and peace of yuletide . . . and bright with the merriment and cheer of good fellowship.

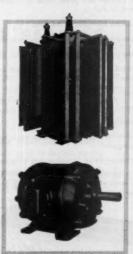
In city and country, on farm and in penthouse . . . thousands of electric lamps will help light the season's festivities and lend cheer to gay gatherings.

Christmas would seem incomplete without the help of electricity ... the same electricity that helps make the products and provisions that are not only important at Christmas but every day of the year. Just as it provides the twinkling gems of light on your Christmas tree, it serves throughout the year to help you to another even brighter Christmas.

Electricity is more important than you may think. Just about everything good depends at some time on electric power. Wagner Transformers and Wagner Motors serve you, and the industries that serve you, through helping provide the power for every need and pleasure. Wagner products are famous for dependable, trouble-free service at farm, home and industrial applications.

Wasner Electric Corporation

6460 PLYMOUTH AVENUE, ST. LOUIS 14, MO., U. S. A.



ELECTRIC MOTORS - TRANSFORMERS INDUSTRIAL BRAKES AUTOMOTIVE BRAKE SYSTEMS - AIR AND HYDRAULIC





SCRAP?



.et AHS provide a mechanical handling sysrem to collect, process and deliver your metal urnings, borings and press scrap to disposal aquipment. WHY?

- · Eliminate confusion in the shop
- · Prevent interruptions to machine operation
- Reduce manpower requirements
- Allow better grouping of production machines
- · Permit reducing aisle space
- · Reduce the accident hazard
- Expedite scrap removal
- Add to salvage value of scrap by proper segregation
- Encourage better housekeeping in the shop

Ask for a survey of your operations and find out how much you can save by handling your scrap mechanically.



million-a-year built-up roof business in greater Detroit, met once a week in a hotel room to agree on which of them would submit the low bid on each available job.

It also charges that they conspired with manufacturers of roofing materials to freeze out nonmembers of the Sheet Metal & Roofing Contractors Assn., of which they were all members.

The companies all deny the charges.

What's Rural?

LITTLE ROCK-Under Arkansas state law, electric co-ops may not serve customers in any city of 2,500 population or more. But what happens when a city annexes a formerly rural adjoining area? That's the issue that will be put up to the state legislature when it convenes next month.

The specific case that brought the matter to a head involved the rapidly industrializing city of Newport, Ark. The city itself is, and has been, served by Arkansas Power & Light Co. Recently, the city annexed an adjoining industrial area, which had been served by a local co-op. Following the annexation, a power consumer in the fringe area demanded that Arkansas Power serve his plant. The case went all the way up to the state supreme court, which awarded the territory to the

Last week Arkansas State Electric Cooperative, Inc., which is made up of the directors of all the rural co-ops in the state, met in Little Rock, agreed to sponsor a bill in the upcoming legislature to permit co-ops to serve city consumers.

Long-Range Profit

HOUSTON-An oil strike nearby has often meant prosperity for a city. But usually not an oil strike 500-odd

Nevertheless, an oil strike in Sherman County, at the top of the Texas Panhandle, may soon be pouring money into the municipal treasury of Houston, some 575 mi. distant.

The reason? Some 6,600 acres adjacent to a newly discovered oil and gas field in Sherman County belong to the estate of a one-time Houston attorney, E. P. Hill, who died in the early 1920s. And Hill's will left a big part of his estate to the city of Houston—or, more exactly, to the Houston Foundation, which is a municipally controlled foundation whose income is to be used for "charitable purposes," not further defined.

The 6,600-acre tract is under lease to Phillips Petroleum Co. Actual drilling on the tract is being held up pending a court decision on some technical provisions of the will.



The Foreign Legion

SAN DIEGO—The shortage of engineers is no more severe anywhere in the country than in southern California's aircraft manufacturing country. One of the big airframe producers, Consolidated-Vultee, has come up with a new plan to combat it.

There are a good many qualified engineers of foreign nationality available in the San Diego area. Trouble is that, since they are not citizens, it's hard to get security clearance on them. And without security clearance, an aircraft company can't even let them through the gates, let alone use them on general

engineering problems. So Convair has set up a Quonset hut outside the gates (picture, above) in which a group of foreign engineers works on nonclassified jobs pending security clearance. The work they do frees qualified engineers inside the plant for classified jobs. At present, there are 24 members of this "foreign legion," from England, Canada, Germany, Sweden, Switzerland, Ireland, China, Czechoslovakia, and Hungary. All have applied for citizenship, and all are now undergoing the long-drawn-out clearance procedure. So far, only one has been graduated from the foreign legion to inside the plant: Gerard Bax, a former KLM pilot.

Update

SEATTLE—Puget Sound Power & Light Co.'s plan to sell its facilities to six Washington Public Utility Districts (BW—Sep.20'52.p120) is still being held up by legal roadblocks thrown up by Washington Water Power Co. (BW—Oct.18'52.p31). Last week Puget hit back: It filed a multimillion-dollar damage suit against Washington Water Power, two of its directors, and two directors of Kitsap County PUD, which withdrew from the deal last month.



REYNOLDS FABRICATING SERVICE

Saves an average 30% scrap loss, plus scrap handling

Scrap from shearing and blanking is remelted immediately at Reynolds plants without costly loss of time, segregation and storing, reshipment between cities, or diversion of valuable metal. You can use all of the aluminum you receive... without delay... without scrap loss. In addition, you realize important savings in handling, storage space, work space and manpower.

Reynolds Aluminum Fabricating Service offers extensive facilities to produce semi-fabricated blanks, completed parts and final assemblies. Quotations on aluminum blanks or parts can be furnished to your drawings and specifications. Technical assistance from aluminum fabricating specialists is available for your problems.

For additional information, write for litera-

ture, or call the Reynolds office listed under "Aluminum" in your classified telephone directory. Reynolds Metals Company, Parts Division, 2085 South Ninth Street, Louisville 1, Kentucky.

Reynolds Aluminum Fabricating Facilities One of the country's most complete facilities for algo-

Over 100 mechanical presses ranging
 Top 2 to 1700 tops

- from 2 to 1700 tons.

 Hydraulic presses from 300 to 5000 tons.
- Equipment for shearing, blanking, forming, riveting and welding, roll forming, finishing and assembly.

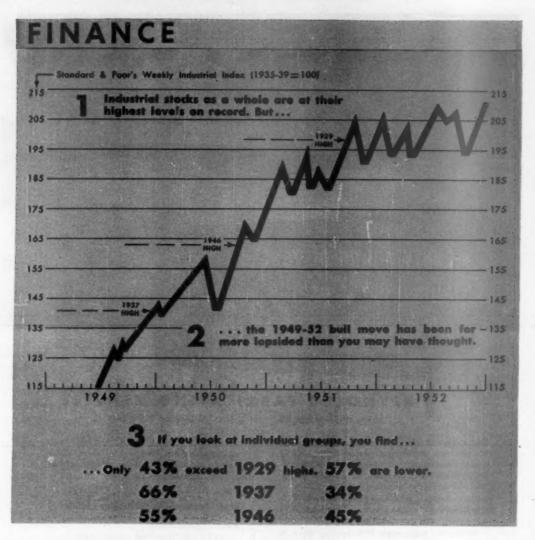
These facilities can assure a steady flow of blanks or fabricated parts to your specifications and production requirements.

Be sure to see "Mr. Peepers" every Sunday night, 7:30 EST, NBC-TV; hear "Fibber McGee and Molly" every Tuesday night, 9:30 EST & PST, NBC.



REYNOLDS ALUMINUM FABRICATING SERVICE

DLANKING - EMBOSSING - STAMPING - DRAWING - RIVETING - FORMING - ROLL SHAPING - TUBE BENDING - WELDING - FINISHING



How Sound Is the "Eisenhower Market?"

"It's never smart to fight the tape."
That Wall Street truism has been more quoted than usual in brokers' boardrooms the country over the last few weeks.

It isn't bad advice for hesitant market dabblers in effervescent times like these. The common sense is obvious provided that the advice is limited to this meaning:

Would-be bears can no more ignore the ticker's daily reports of rising prices during a bull market than bulls can ignore the obits recorded by the ticker while prices are diving. Obstinacy—To fight the tape is just plain obstinate; it's like the backwoodsman who saw his first giraffe, then told his wife: "Nobody's going to fool me there ain't no such animal."

It's possible to go too far in the opposite direction, though. You're under no obligation to junk well-reasoned market opinions and tag along after the crowd. Fighting the tape is no worse than letting yourself be stampeded against your will by what the ticker is reporting.

Many shrewd stock market operators have been quite willing to pull in their horns a bit lately. Such veterans think it's time to rest while they try to gauge the basic soundness of the "Eisenhower phase" of the 1949-1952 bull market (page 76).

This school of thought simply isn't satisfied that "this is it," as so many Wall Streeters have been shouting ever since the election returns started prices whirling to new highs.

• Questions—The doubters grant certain facts. Business is at boom levels; so are many stock market prices. Soon the country will be run by "hard money" Republicans, after 20 years of

What JACK& HEINTZ is doing about ...

HEAT RESISTANCE

Extreme jet engine heats give a "hot foot" to electrical components. To avoid bulky insulation, J&H developed a new heat-resistant plastic skin that enables compact electrical components to withstand temperatures as high as 500°F.

Our business is developing and building special electrical, hydraulic and mechanical devices to meet unusual operating conditions. Often, new engineering and production techniques must be worked out. Sometimes, we must even create entirely new materials. This versatility enables us to solve problems of compacting power into lightweight units—of controlling it—and protecting it against extremes of heat, cold, humidity, vibration, or other exacting conditions.

J&H on aviation or commercial products stands for advanced engineering... precise manufacturing... pretested performance. Write Jack & Heintz, Inc., Dept. 1251, Cleveland 1, Ohio.



JACK & HEINTZ
Rotomotive
EQUIPMENT



means electrical, hydraulic or mechanical devices designed to solve unusual problems of developing, controlling or using power.

Generating Equipment — a-c and d-c—including Control Systems and Components • Electric Starters • Actuators and Special Aircraft Motors • Custom-built Commercial Motors • J&H Eisemann Magnetos



WHEN WE WANT THE IMPOSSIBLE WE CALL THE ISLIVING TUGERS

anys C. J. Sant, Obvision Truffic May. LINCOLN MERCURY DIVISION of Ford Motor Co.











OFFICES IN PRINCIPAL CITIES . GENERAL OFFICES: LOCKNEED AIR TERMINAL, BURBANK O, CALIFORNIA . CABLE: FLYTIGER

"inflation-minded" Democrats. But they ask two basic questions:

Isn't a temporary business slump likely, even though, the political shift may ultimately bring sounder conditions? In other words, "Should I not play it safe by cashing in my stocks while they're still showing a profit, and take a chance on replacing them at much lower prices?"
Did the election of Gen. Eisen-

 Did the election of Gen. Eisenhower start a new era? Is the rebirth of business confidence more than temporary? Does it indicate a long period

of rising stock prices?

As far as the next few months are concerned, few people are much worried about either dividends (an important market price determinant) or prices. Fourth-quarter operating levels of business have improved sharply, which augurs well for earnings. And the market should benefit from the investment of "yearend" funds. (Pension funds are one example of heavy early-in-the-year security buyers. Some Streeters estimate that they normally buy 40% of their new investments during January and February.)

It's the longer-term picture that defies prophecy. Can confidence continue to flourish under existing world conditions? What will happen to market morale if the government tries to cut spending steeply? Will civilian demand be enough to keep our hugely expanded production facilities running at a level high enough to overcome the high costs of business? Will commodity prices continue in their worldwide slump?

Only time can give definitive answers to these and other questions. Already, a number of smart Wall Street observers, investors, and traders say that, at best, we are in for some rather serious squalls before the economic skies show any of the deep blue that promises an extended period of fair weather.

• Matter of Morale—Much depends on the psychology of the investing public at the time such squalls hit. People might lose a lot of the new-found confidence that has been so evident. A real drop in morale could drive many investors to sell off their shares at a far lower price than was really necessary.

These factors—some economic, some intangible—aren't the only things that have been recruiting believers in stop-look-and-listen.

Day by Day—Another cause of hesitancy has ben the nature of the daily trading. There have been signs that the basic underpinnings of the market aren't quite so strong as so many Wall Streeters—and the various stock averages—insist.

Consider the leadership of the market. Today one group will lead the advance, tomorrow another, next day still a third. Moreover, these alternating





Sailing date: FRIDAY . . . destination: NAKNEK

Only 2 ships a year leave our west coast for Naknek, Alaska... and the next was to leave on Friday.

That's what made this particular Monday a hectic one for Graybar's Seattle office. An electrical contractor had just been awarded the contract for an important power installation near Naknek. He needed varying quantities of 175 hard-to-get electrical items ranging from poles to transformers. And, he needed them fast—collected, packed, and aboard by sail-

ing time Friday. Could Graybar do it in 4 short days?

Trained to cope with all types of emergencies, Graybar procurement specialists set to work at once. A thorough knowledge of Graybar's own local warehouse stocks and of the help available from co-operative Graybar suppliers turned the trick. By sailing time Friday, 10 tons of electrical materials were safely stowed in the freighter's hold. Only six small items remained to be flown in later.

• Though it's always safer to plan ahead on electrical supplies, Graybar's nation-wide offices handle many similar emergency orders. From the utility crippled by fire, flood, or storm to the manufacturer caught short of maintenance materials, Graybar offers convenient, efficient service on everything electrical.

Specialists, too, are available to help you with technical problems and to assist in the selection of alternates for electrical items in short supply. See for yourself — make sure your next order, for things electrical, is placed via Graybar.

GRAYBAR ELECTRIC CO., IMC.

Call Graybar first for



leaders have collectively been the groups most heavily represented in the price averages followed by the general public.

This gives the public the impression that there has been an over-all upsurge of prices. What has actually happened is quite different; violent bubbling at the top, but nothing comparable going on below.

Normally, this isn't a good sign. Nor, despite the blooming of confidence since Election Day, does it represent much improvement over the general market pattern of the last year or so. Just as in the earlier market, the "Eisenhower move" has only been a "real" bull market if you happened to hold the right stocks.

• Spotty—The group that won't be stampeded warns against being overawed by the long lists of daily highs recorded since Election Day. A close check will show you that many of the same names appear day after day; fewer newcomers than you might think are being added to the honor roll. What's more, many of these new 1952 highs haven't reached the peaks touched earlier in the 1949-1952 bull market.

These points are highlighted by a survey issued by Wall Street's H. Hentz & Co., covering the price performances of all commons listed on the Big Board in the first 11 months of 1952. It paints a strange picture for a bull market.

The compilation shows that less than half of the Big Board's industrial commons closed at the end of last month higher than they had been when the year began. Less than a third of the group had gains of 6% or more; close to 40% were 6% or more below their 1951 closing.

1951 closing,

• Laggards—This picture may have improved since the compilation was made; but it's problematical whether the gain is substantial. A mid-December review of the 51 stock groups that make up Standard & Poor's weekly industrial index showed that seven of the groups were still below highs set earlier this year. Another 31 groups were below their highs recorded in 1949 or later.

S&P's weekly industrial index has hit a succession of new highs. Last week it was 7% above its 1929 high, 50.1% higher than in .1937, and 29.4% above the top in 1946. But there were many laggard groups (chart, page 62). Only 43% of the groups in the index were above their 1929 levels, only 66% above their 1937 peaks, only 55% above 1946.

The utility group—bought heavily before the election because of its "anti-recession properties" (BW—Oct.11'52, p144)—probably, shows a more universal rise than any of the three major segments of the list. But now some people are beginning to wonder if the utilities, like the industrials generally, haven't advanced enough. The public service committee of the Investment Bankers



to the executive who could use more days in a month

With your present staff already operating full-time on regular assignments, how often have you wished there were more days in a month to take care of the special problems which arise in your business?

One way to get more executive-days per month is to make use of the services of an outside consulting firm such as Ebasco. Many companies have learned from experience that such a course of action usually leads to substantial savings in executive time and energy—permits their own top men to continue functioning at maximum efficiency on regular work.

Because of its continuing relationships with many and diversified industries, its knowledge of all kinds of business situations, and its contact with important new developments, Ebasco is well equipped to handle your special problems . . . whether they involve corporate finance, systems and methods, space planning, industrial relations, taxes, insurance or sales and marketing.

Regardless of the size of your firm or the scope of your business problem, EBASCO engineers, constructors and business consultants can render your company prompt and efficient service.

For a full story of EBASCO's scope of operations, write for your free copy of "The Inside Story of Outside Help." Address: Ebasco Services Incorporated, Dept. C, Two Rector Street, New York 6, N. Y.



Appraisal
Budget
Business Studies
Business Studies
Business Studies
Business Studies
Business Studies
Financial
Inspection & Expeditions
Inspection & Expeditions
Businers, Pensions
& Safety
Purchasing
Rates & Pricing
Research
Sales & Marketing
Systems & Mothods
Taste
Traffic
Taste
Traffic
Washington Office

SBASCO TEAMWORK GETS THINGS DONE ANYWHERE IN THE WORLD EBASCO SERVIC

INCORPORATED

NEW YORK . CHICAGO . WASHINGTON, D. C.



COMFORT

Step up efficiency . . . KATHA-BAR maintains true comfort conditions of 78F, 45% R.H. for Toledo Scale, Toledo Blade, Kroger and many others.

PRODUCTION PROCESSING!

When Eli Lilly, Ohio Match, Haloid, many others turn to KATHA-BAR for humidity conditioning vital production processing, there is a reason. KATHABAR protect quality . . . saves dollars.

CONTINUOUS SUB-FREEZING TEMPERATURES!

Where quick cooling and drying are important, you can appreciate KATHABAR Humidity Conditioning. Two prominent candy makers cut cooling time and attained continuous production. Schenley Labs assure continuous operations—eliminate shut-downs with KATHABAR. There are dozens of others.



MAIL THIS VALUABLE COUPON TODAY! Let us tell you what KATHABAR could do for you.

Λ	0	
SIIDEAPE	COMBUSTION	I
DUDIALE	JUNDUDIIUN	
	1	7

orporation

Kathabar Surfuce Janitrol

Janitrol
Vithout obligation, send me the complete stary in KATHABAR, I'm interested in.
n KATHABAR, I'm interested in.) comfort () production processing) continuous sub-freezing temperatures
NY
S

CITY.....ZONE....STATE.....

Assn. has urged that "bankers, utility managements, and regulatory bodies" use "caution . . . in interpreting this action of the utility common stock market."

The committee says the action is largely due to the concentrated buying of utilities by institutions "accumulating a desired position" in the group. It thinks lower prices are likely once demand settles back to the normal needs of investors.

National Lead Arranges Doehler-Jarvis Merger

National Lead Co., the largest U.S. producer of materials using lead and tin, and Doehler-Jarvis Corp., leading producer of nonferrous die castings and hardware, have arranged to merge through an exchange of stock.

Discussions are believed to have gone on for some time, but the deal was announced only last week. Stockholders of Doehler-Jarvis, if they O.K. the plan at a special meeting Jan. 30, will get approximately 1.15 common shares of National Lead for each share they hold. There are about 1,067,000 shares of D-S outstanding—and no preferred. Under the merger plan, 1,228,000 shares of National Lead would be handed over in exchange.

The plan is for D-J to become a division of National Lead, thus expanding the latter's die-casting and metal-

fabricating activities.

National Lead, which has assets of approximately \$230-million, is already active in many fields involving non-ferrous metals. These fields include paint, chemicals, metal products, lead hardware, solder, acid-handling equipment, journal bearings for railroad cars, and oil well drilling materials. It is also a producer of titanium alloys. It makes a zinc alloy called Kirksite for the aircraft industry, with which D-J's die castings should fit nicely. Last year sales totaled nearly \$390-million.

D-J, which had about \$42-million in assets at the end of 1951, makes non-ferrous die-castings of many types and

Its castings are used in the auto, household appliance, and TV industries, as well as for office equipment, fuel pumps, cameras, and toys. It also makes hardware, mostly nickel-plated or chromium plated, for some of these products. About half its \$85-million sales last year were to industry.

Just before the merger, common shares of both National Lead and Doehler-Jarvis, which are listed on the New York Stock Exchange, were selling very close to the merger relationship—National Lead at \$31.38, Doehler-Jarvis at \$34.50.

FINANCE BRIEFS

The funded debt of federal, state, and local governments added up to a record \$289-billion at the end of June. The Bureau of the Census says that's a per capita debt load of \$1,839 for every man, woman, and child in the United States.

Rediscounts of Federal Reserve member banks last week jumped \$161-million, to nearly \$1.8-billion. That's the highest rediscount total since July, 1921—more than 31 years ago.

Industrial companies are now paying some \$2.2-billion a year into employee retirement funds. That's the estimate of Rawson Lloyd, vice-president of Wellington Fund, open-end investment company. Lloyd reports that some 18,000 pension funds and profitsharing funds are already in operation; new ones are being set up faster than 300 a month. Lloyd figures \$1.2-billion a year is being paid into trusteed retirement plans, around \$1-billion into insured plans.

Recent large private sales of new issues include \$12-million Minneapolis Moline Co. 15-year, 3½% notes, and \$5.6-million H. K. Porter, Inc., 15-year, 4½% notes. Connecticut Light & Power Co. is arranging a direct-from-issuer-to-buyer sale of \$35-million 30-year, 3½% mortgage bonds.

Eastern Air Lines employees collectively are the "largest single owner" of the company's stock, holding outright "substantially more than 20%." That was reported this week by Capt. Eddie Rickenbacker, president and general manager, after 84,000 shares were distributed to complete the third program under which employees bought shares out of their wages.

Pennsylvania RR says it's now the nation's biggest rail operator of diesel power. Its lines are using 316 road diesels and 978 switchers—in all \$311.8-million worth. Another 45 diesel switchers have been ordered; when the last of these is delivered next March, Pennsy thinks it will be handling 91.1% of all road and switching service with diesel units.

Commonwealth Edison Co. stockholders bought nearly all of the 1,155,730 shares of new \$1.40 preferred stock that were offered to them for \$31. Less than 71,000 shares had to be taken up by the underwriters, an investment banking group.



-says a Traffic Manager about Sentinel Service

It used to be that guessing and wondering were major occupations with shippers and receivers. They shipped a car, and hoped.

Today, B&O's Sentinel Service offers dependable schedules from siding to siding. To those who use B&O it is almost like having their own private railroad!

Even if schedules are interrupted enroute, shippers and receivers hear about it through the *Automatic Records* feature of Sentinel Service. They are also advised when cars are reforwarded.

You know with Sentinel Service. Ask our man!







BALTIMORE & OHIO RAILROAD

Constantly doing things-better!



Easy-moving for TV sets!

The TV set you buy should be easy-to-move... so you can position it for comfortable viewing, and prevent harmful jolting when you move it. Make sure it's easy-to-move by insisting on a set equipped with easy-rolling Bassick "Diamond-Arrow" Casters. Easy, quiet rolling action is assured by Bassick's patented "two-level" ball-bearing construction. It also pays to look for Bassick Rubber-Cushion Glides or Casters on all

the furniture you buy, for this TV age demands easy movement of furniture without damage to floors and rugs.



Easy-moving for furniture!

To make your furniture move with ease and protect floors, simply attach Bassick Rubber-Cushion Glides on the legs. Their base is polished hardened steel... broad, flat, and cushioned in rubber... features that save wear and tear on floors and rugs. If your TV set's not "on wheels," put on Bassick Casters or Glides. Most

hardware stores can supply you.







SECRETARY-designate George M. Humphrey has asked Eisenhower to O.K. these top assistants:



SPECIAL DEPUTY, consultant on debt and monetary policy: banker W. Randolph Burgess.



ASSISTANT SECRETARY: 45-year-old attorney H. Chapman Rose, specialist in corporation law.



UNDER SECRETARY: Marion B. Folsom, treasurer of Eastman Kodak, Social Security specialist.

The Treasury's New Team

George M. Humphrey, Presidentelect Eisenhower's choice for Secretary of the Treasury (BW-Nov.29'52, p27), has picked some top assistants (pictures). Their selection gives some broad hints as to the economic policies of the next administration.

Humphrey's team:

 W. Randolph Burgess, chairman of the executive committee of the National City Bank of New York, is one of the best-known bankers in the U.S. He will be consultant and special deputy to Humphrey on debt management and monetary policies. Burgess, 63, has been known for many years as an expert on federal debt management and central-banking techniques. He feels the Federal Reserve System should be independent of the Treastry.

His appointment signals that there will be no pulling and hauling between the Fed and the Treasury in the new administration, and that an expert



Why won't this table burn?

A thin layer of aluminum foil beneath the plastic veneer surface of this handsome table quickly spreads the heat. Thus no 'hot spot' can form—and the burning cigarette won't even scorch this type of table.

This spreading of heat, because of the excellent conductivity of aluminum, is but one of a unique combination of advantages, among which are lightness, strength, corrosion resistance, light reflectivity, economy.

For these reasons, this versatile metal gives you greater value! So always look for and ask for aluminum products. They'll be more and more plentiful because the aluminum industry is now completing an ex-

pansion program greater than that of any other basic industry.

Kaiser Aluminum is now finishing great new plants which will boost its capacity 137%. As a result, Kaiser Aluminum will be the only major producer to increase its share of total production.

As a major supplier to industry, Kaiser Aluminum is constantly working with manufacturers to show how aluminum can improve products and reduce costs...to give America greater convenience and greater value.

Kaiser Aluminum offices and warehouse distributors in principal cities. Kaiser Aluminum & Chemical Corporation, Oakland 12, California.

Kaiser Aluminum

A major producer in a growing industry



Heat conductivity of aluminum enables the new air-cooled, Vtype tank engine to dissipate quickly the intense heat generated. Also applies to engines for aircraft trucks, automobiles.



Heat cenductivity of aluminum means better cooking because heat is distributed evenly over cooking surface. When you buy pots, pans, pressure cookers, griddles, insist on aluminum!



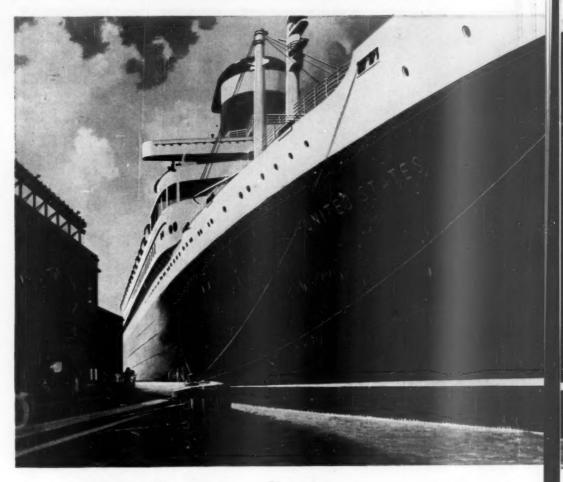
Heat conductivity of aluminum means better heat. The ironing surface of today's improved electric iron is made of aluminum to assure rapid and even distribution of heat. Light weight and beauty add to its value.



Heet conductivity of aluminum walls in frozen food cabinets speeds freezing because warmth of food is quickly absorbed. Refrigerator ice trays, meat trays, etc., have same advantage. Ask for aluminum in appliances.



Heat conductivity of Kaiser Foil makes it the ideal wrap in which to cook roasts, fowl. Even spread of heat means faster, more uniform cooking. Buy rolls of Kaiser Foil from grocery, drug, hardware and variety stores!



The "pillow" that nestles a

New speed queen of the Atlantic, the S.S. United States makes its New York home at a completely reconditioned pier. One bump against the corner of the pier could deform the plates of the ship—cause costly repairs and expensive delays—and damage the pier as well. Yet, in docking, the great ship is safely warped around the end of the pier by a combination of wind, tide and tugs as her side rests against the dock.

Secret of safe dockings is a huge dock fender that "pillows" the bulk of the liner. It's built around special extruded rubber tubing—15" in diameter, compounded to resist pressure, abrasion, and constant immersion in

salt water. The designing engineers and contractors who installed this bumper, the Geo.W. Rogers Construction Corporation, knew what was needed in general—and called in the G.T.M.—Goodyear Technical Man—for specific engineering and compounding of these huge rubber fender parts.

Meeting exacting demands with parts molded or extruded from rubber is a specialty of the G.T.M. For he knows rubber in all its forms far better than anyone else. In large parts or small, simple or extremely complex in design, he can specify compounds to deliver exactly the service you need—and in the process, simplify your

problems of product design or parts procurement.

de

M

Unrivaled anywhere, the facilities of the world's largest molded goods plant—Goodyear St. Marys—are available to the G.T.M. to insure delivery of the parts and subassemblies needed to meet your production line requirements. Even more important, you get outstanding service from Goodyear St. Marys—the backing of a trained staff of engineers, chemists, sales engineers and an experienced production staff. You get complete service—from product design, in cooperation with your own staff—through production—to in-the-field follow-up.



GOODFYEAR

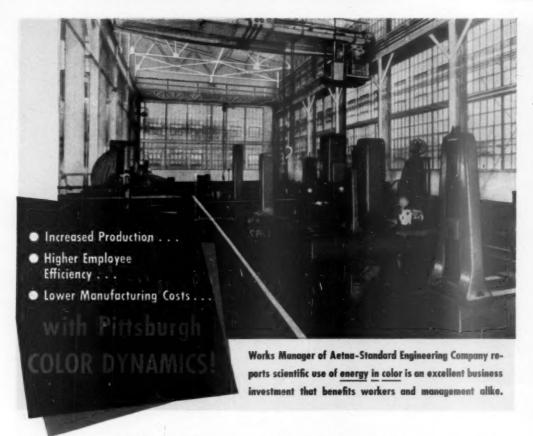
t

r d

THE GREATEST NAME IN RUBBER

We think you'll like
"THE GREATEST STORY EVER TOLD"

Every Sunday - ABC Network



PITTSBURGH can present no more convincing statement of the many benefits that result from the use of COLOR DYNAMICS-based upon the scientific principles of the energy in color-than this letter from R. D. Johnson, Works Manager of The Aetna-Standard Engi-neering Company of Youngstown, Ohio, consultants, designers and builders for steel and non-ferrous industries.

e "We are pleased to summarize what application of your system of COLOR DYNAMICS has done for our Ellwood City, Pennsylvania, plant.

• "It was our custom to paint our plant and equipment periodically, mainly for the purpose of protecting surfaces.

· "Puinting can be a business investment, the same as machine tools and equipment. When a machine tool is purchased, the effect this tool will have on cost savings, production, employee efficiency, etc., are considered very carefully. Why not apply this rule to painting?

· "With this thought in mind, we asked

color engineers of The Pittsburgh Plate Glass Company to visit our plant to ex-plain the advantages of COLOR DYNAMICS.

• "The survey was made and the suggestions made by Pittsburgh color engineers were highly acceptable to our management.

 "In a recent survey we were pleased with the reactions and comments of our plant employees.

(a) General appearance was greatly improved.

(b) Better light reflection from ceiling and walls caused less eyestrain.

(c) Specially marked lines signified bazards and belped to reduce accidents.

(d) Housekeeping was simplified. Employees take pride in their work area and help to keep it clean.

(e) Improved morale belped to increase efficiency as well as to create better industrial relations.

• "Considering every factor, we believe that Pittsburgh COLOR DYNAMICS has contributed greatly to the success of our operations.

You Can Have A Color Engineering Study of Your Plant FREE on Request

• Why not investigate what Pittsburgh COLOR DYNAMICS will do for your plant? For a complete explanation of how this scientific painting system can be made to work for you, send for our free, profusely-illustrated booklet.

• Better still, let us make a detailed COLOR DYNAMICS study of your plant for you-free and without obligation. Call your nearest Pittsburgh Plate Glass Company branch and arrange to have one of our trained color engineers see you at your convenience. Or mail coupon.

SEND FOR A COPY OF THIS BOOK! Pittsburgh Plats Gazs Co., Paint Div., Department 8W-122, Pittsburgh 22, Pa. Please send me a FREE copy of your Booklet "Color Dynamics In Industry." Please have your representative call for a Color Dynamics Survey of our properties without obli-gation on our part.



hand will begin the difficult task of refunding some of the huge short-term federal debt into longer-term issues.

Marion B. Folsom has spent his business life with Eastman Kodak Co., Rochester, N. Y., and is now its treasurer. Now 59, he gained national stature in economic affairs through advisory posts in the Roosevelt and Truman administrations—where his specialty was Social Security—and through his connection with the Committee for Economic Development. A founder of CED, he is chairman of its board of trustees. He will be Under Secretary of the Treasury, with special reference to tax policies. He may well emerge as Eisenhower's chief deflation fighter if the economy should slow down.

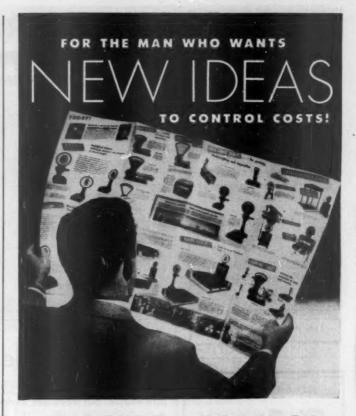
H. Chapman Rose, Cleveland attorney specializing in corporation law, has worked in Washington before in administrative and legal posts. He has also worked with Humphrey, and the two are well acquainted with each other's thinking. Rose, now 45, will be Assistant Secretary of the Treasury.

• Hand-Picked—These men were picked when Humphrey conferred last week with Eisenhower on the cruiser Helena. Humphrey says that they were his personal selections. "They were the first and only people I asked to take those jobs."

He made his choices on the basis of experience and ability. Burgess has very wide contacts among U.S. bankers, whom he has served as president of the American Bankers Assn. Since 1938 he has been a top executive of the No. 2 U.S. commercial bank, the National City. Starting in 1920 with the Federal Reserve Bank of New York, when the system was in its infancy, he worked in several jobs, and from 1930 to 1938 managed the openmarket account. In that job, he carried out a large part of the Fed's monetary policy. His book, "The Reserve Banks and the Money Market" (first written in 1927 and since revised), is considered a classic.

Like Burgess, Folsom was first known as a whiz with statistics. He became assistant to the late George Eastman, and had a key role in developing Kodak's employee benefits. He's considered the father of Kodak's conservative dividend and financial policies: building up reserves, paying for expansion and replacement out of earnings rather than borrowing.

Rose is one of that distinguished clan who served a legal apprenticeship to the late Justice Oliver W. Holmes. He came back to Washington during the war to fill Army staff jobs, and in 1946 was director of the Office of Contract Settlement. Most of his time has been spent with the Cleveland law firm of Jones, Day, Cockley, & Reavis.



...LOOK TO TOLEDO!

Whatever your problems in weighing, checking, testing, counting, batching, force-measuring and other weighing operations... there's a modern Toledo to do the job with high accuracy, speed and dependability. Have you checked your scale needs? Get latest information in this widely used reference on Toledos that help you guard costs... speed production. Look into the advantages of Printweigh in stopping losses that originate through human errors. Send coupon for new edition—"Toledo, Headquarters for Scales."



THE SUMITOMO BANK, LTD.

THE BANK OF OSAKA, LTD.
RESUMED ITS ORIGINAL NAME
AS FROM DECEMBER 1, 1952

HEAD OFFICE: OSAKA, JAPAN

137 BRANCHES THROUGHOUT JAPAN

NEW YORK AGENCY:

149 BROADWAY, NEW YORK

MEMORANDUM TO:

The Financial Vice President

Over \$1 billion of freight cars, passenger cars and diesols

This is the amount of equipment purchased by railroads, including practically every major system in the United States, from funds obtained through the public sale and private placement of Equipment Trust Certificates and Conditional Sale Contracts by Salomon Bros. & Hutzler and associates during the past sixteen years.

The ability of our firm to obtain financing for industry is amply indicated by this accomplishment. We shall be pleased to discuss your financing needs with you and suggest a plan adapted to your par-

ticular requirements, be they large

SALOMON BROS. & HUTZLER

Members New York Stock Exchange

SIXTY WALL STREET, NEW YORK 5

THE MARKETS

COMMODITIES: Scraping Bottom?

	Pro-	195		
	Korea	High	Low	Latest
Butter (ib.)	\$0.66	\$0.83	\$0.66	\$0.661/2
Copper (lb.)	.221/2	.241/2	.241/2	.241/2
Corn (bu.)	1.51	1.98	1.53	1.67
Cotton (lb.)	.338	.458	.333	.333
Cottonseed oil (II	.154	.267	.128	.163
Hides (lb.)	.258	.435	.14	.185
Hogs (cwt.)	20.25	23.75	16.65	16.75
Lard (lb.)	.109	.20	.08	.08
Lead (lb.)	.111/2	.19	.131/2	.14
Rubber (lb.)	.282	.75	.26	.32
Steers (cwt.)	29.25	37.871/2	31.371/2	31.75
Sugar (lb.)	.058	.068	.057	.0605
Tallow (lb.)	.048	.182	.046	.05
Wheat (bu.)	2.15	2.58	2.28	2.43
Wool (tops, lb.)	2.00	4.35	1.61	2.01

The Long Slide Levels Off

Some commodities—butter, hogs, cotton—are still in bad shape. But there are factors working to keep prices from dropping much further. The worst is probably over.

Don't look for that 20-month-old slide in commodity prices to keep on forever. There has, in fact, been a little improvement since late in October. And there are factors—quite aside from the election and the law of averages—now working to stem the tide:

 Booming business and weak prices on industrial raw materials are strange mates.

 Seasonal forces and built-in props should stabilize farm prices.

• Worst Is Over—This might not be a bill of goods that you could easily sell to the cotton planter (who saw the bottom drop out of his market last week), or the hog raiser (who has watched prices flop from nearly \$24 a cwt. last July to barely \$16.50), or the dairyman (who saw butter bringing better than \$5\u03c8 a lb. at wholesale last February, now finds it at 65\u03c8).

Yet the worst probably is over, even for the farm products that have been the weakest segment of the price indexes. While the seasonal peak for livestock slaughter has pulled down prices, supplies of meat animals will be tapering off after the turn of the year.

Moreover, the government appeared in the market for smoked pork products this week in an effort to stabilize prices.

• Support—Cotton, too, is down to the point where government supports are an important factor in the market.

Apparently cotton growers were slow to realize how much these supports would be needed. A lot of them sold their cotton while prices were higher (instead of impounding it under loan to protect market prices). And, once a farm product gets out of the farmer's hands, it presses on the market; for it no longer is eligible for these support loans.

As prices slid, farmers who still had cotton began to get in line for loans. Half-a-million bales have come under the support program in the last few weeks—and more is likely to be impounded before prices can be expected to improve much.

The trouble with cotton is simply a 15-million-bale crop, with demand falling considerably short of that figure. Use at home is good, but by no means spectacular. And exports since the cotton year began last Aug. 1 have run



When does a "simple cold" become serious?

Whenever fever—even a degree or so above normal—accompanies a so-called "simple cold," it is serious enough to be called to the attention of your doctor.

Many of us regard a cold all too lightly—even when it brings on "a touch of fever." We may say: "It will be gone tomorrow," and, relying on our favorite home remedy, attempt to continue our usual activities.

Doctors take a more serious view of colds. They believe that any cold should be properly treated—and preferably as soon as it develops. While many measures are used for the relief of colds, most physicians believe that the best treatment is simply this:

Remain at home and rest as much as possible, preferably in bed; eat light, wholesome food; drink plenty of liquids; and be sure to check your temperature.

The latter point is particularly important because a feverish cold often indicates the onset of more serious illnesses—sinusitis, ear infections, bronchitis, and certain communicable diseases including the various forms of pneumonia.

In fact, it has been estimated that colds are the starting point for nine out of ten cases of pneumonia. So, in addition to keeping check on your temperature, it is wise to watch out for chills, pain in the chest or side after coughing or deep breathing, and the appearance of rust-colored sputum. Should any of these symptoms of pneumonia develop, call the doctor at once.

Fortunately, medical science has made enormous strides against pneumonia. Just a few years ago, one out of every three pneumonia victims died. Today modern drugs are so effective that only one out of every 25 cases is lost. This record should not lull anyone

into a false sense of security—for pneumonia can still strike and rapidly become serious. Prompt treatment is just as vital as ever.

Good health habits help prevent winter ailments such as pneumonia. So, during the cold months ahead, you may find these simple precautions helpful in conserving your resistance against colds, pneumonia, and other respiratory diseases:

Avoid loss of sleep, excessive fatigue, and over-exposure to extreme cold and dampness.

Eat a well-balanced daily diet.

Stay away from people who cough or sneeze carelessly.

See your doctor for a thorough physical examination if you have frequent colds.

Metropolitan Life Insurance Company

(A MURUAL CONFANY)

1 Madison Avenue, New York 10, N. Y.

Please mail me a free copy of your booklet, 153S, "Respiratory Diseases."

Name

Street

City

Street



"More than a book or just a superb Christma present. It is a foundation on which every Amer-ican home should build its library."—Harrison Smith, President of THE SATURDAY REVIEW

THE COLUMBIA ENCYCLOPEDIA



A whole library in one volume - 6,000,000 words, 70,000 articles, 2,211 pages - \$28.50 At your bookseller COLUMBIA UNIVERSITY PRESS





less than half what they did a year ago.

Grains, too, are depressed by large crops-though over 350-million bu. of wheat have been placed under price-support loans. And record world output of grains is cutting U.S. exports.

· Rubber Story-Among industrial raw materials, rubber provides an example of how the boom can alter price prospects. Natural rubber crashed from 85¢ a lb. late in 1950 to 26¢ in October; since then it has rallied smartly to 33¢.

Rubber's rally may not be typical (although hides put on a similar show a little earlier as shoe sales picked up). And it may have been overdone, as sloppy markets the last few days have indicated. Yet it gives some idea of what can happen with industry chewing up materials at today's breakneck rate.

Bull Markets: How Long Do They Last?

The only thing consistent about bull markets is that, like the stock market itself, they're always inconsistent. History shows that each has been a law unto itself. So it has never been possible to set up mortality tables that can be used as a yardstick in figuring out the possible life span of any one of them.

Primarily, that's because a bull market follows Newton's first rule of matter-the law of inertia-and continues in motion until outside forces intervene. What that means is simply this: The length of a bull market's life normally depends less on momentum than on interference.

The present bull market is now almost 3½ years old. Only three of the

13 bull markets since 1900 have lasted any longer.

Where the rail shares have been concerned, the current move rates even higher ranking. Only once before did the Dow-Jones rail average ever chalk up a bigger gain on percentage basis.

Percentagewise, the performance of the D-J industrial stock yardstick is less impressive. Its 1949-52 advance to date has been exceeded on seven occasions since the turn of the century. But you can blame that on the high level of the industrial average when the current upswing started. If you take its showing on the basis of points gained, the 1949-52 bull market in industrial stocks already has become the third most profitable on record.

PAULPOARS

INDUSTRIALS

	INDUSTRIALS				RAILROADS				
	Dow-Jones - Gains -			- Weeks		Dow-Jones - Gains -			- Week:
	Index	Points	%	Lasted		Index	Points	%	Laste
June 1900 to	53.68				June 1900 to	72.99			
Sept. 1902	67.77	14.09	26.2	117	Sept. 1902	129.36	56.37	77.2	113
Nov. 1903 to	42.15				Sept. 1903 to	88.80			
Jan. 1906	103.00	60.85	144.3	115	Jan. 1906	138.36	49.56	55.8	121
Nov. 1907 to	53.00				Nov. 1907 to	81 .41			
Nov. 1909	100.53	47.53	89.7	105	Aug. 1909	134.46	53.05	65.2	90
July 1910 to	73.62				July 1910 to	105.59			
Sept. 1912	94.15	20.53	27.9	114	Oct. 1912	124.35	18.76	17.8	114
Dec. 1914 to	53.17				Dec. 1914 to	87 . 40			
Nov. 1916	110.15	56.98	107.2	100	Oct. 1916	112.28	24,88	28.4	93
Dec. 1917 to	65.95				Dec. 1917 to	70.75			
Nov. 1919	119.62	\$3.67	81.4	98	Oct. 1919	82.48	11.73	16.6	94
Aug. 1921 to	63.90				June 1921 to	65.52			
Oct. 1922	103.43	39.53	61.9	59	Sept. 1922	93.99	28.47	43.5	64
July 1923 to	86.91				Aug. 1923 to	76.78			
Sept. 1929	381.17	294.26	338 6	318	Sept. 1929	189.11	112,33	146.3	317
July 1932 to	41.22				July 1932 to	13.23			
Mar. 1937	194.40	153.18	371.6	243	Mar. 1937	64.46	51.23	387.2	244
Mar. 1938 to	98.95				Mar. 1938 to	19.00			
Nov. 1938	158.41	59.46	. 60.1	32	Jan. 1939	34.33	15.33	80.7	40
April 1939 to	121 . 44				April 1939 to	24.14		0 .	
Sept. 1939	155.92	34.48	28.4	22	Sept. 1939	35.90	11.76	48.7	25
April 1942 to	92.92		-		June 1942 to	23.31			
May 1946	212.50	119.58	128.7	214	June 1946	68.31	35,00	150.1	211
June 1949 to	161.60				June 1949 to	41.03			140
Date	285 69	124.09	76.8	182	Date	108.96	67.93	165.6	182

The boss who faced a denma



INSTRUMENTS EXPAND PRODUCTIVE CAPACITY
... reduce stoppages ... increase uniformity . . .
eliminate rejects.

HE was positive that the molding department needed another press to keep up with delivery demands . . . and he was just as positive that he couldn't afford it.

Then he installed better automatic control . . . with Brown instruments. Reject rates dropped sharply . . . down-time disappeared . . . and, altogether, production was boosted nearly as much as if he had gotten the extra press.

Increasing production is only one of many ways in which Brown instruments and controls contribute to industrial progress. Their mechanized brainpower helps accelerate research, reduce costs, improve product quality . . . too!

You can realize these same benefits . . . by having your research, engineering, or production executive write or call Honeywell for a discussion of advanced instrumentation for lab, pilot plant, or full-scale operation.

MINNEAPOLIS-HONEYWELL REGULATOR Co., Industrial Division, 4525 Wayne Ave., Philadelphia 44, Pa.

America lives better-works better-with Honeywell controls.

Honeywell

BROWN INSTRUMENTS

First in Controls.



PRODUCTION

Calling in Psychologists Early

Plant machinery has taken on so many electronic and mechanical gadgets that the average worker can't keep up with his machine.

A few years ago, the military began calling in applied psychologists to "humanize" the machines—but only after the designs had been completed.

Today, the psychologist is working hand-in-hand with the designer—and from the very beginning.

A few years ago, military men found that a lot of new weapons were getting too complicated for the men who had to operate them. Industry found much the same thing with new plant equipment. Electronic and mechanical devices had been added so fast that the human mind couldn't keep up. Applied psychologists were called in to "humanize" the machines (BW-May

6'50,p51).

While the psychologist helped, it was clear that he could have helped a lot more if he had been called in when the new equipment was in the design stage. Now the military as well as private industry is beginning to bring designers and applied psychologists together before the first design is drawn. . Too Late-Shortly after the end of World War II, the psychologists were turned loose on the nearly complete designs for new machines to be used for military production. At that point, about all the psychologists could do was change dials for easier reading, color or illumination for less eve strain, size or shape of knobs and wheels for easier identification, and a few other minor things that wouldn't hurt the over-all engineering. Obviously this helped some, but it wasn't enough. Private industry was even slower to tackle the problem, largely because of the expense involved in redesigning

To remedy this, consultant firms, such as Dunlap & Associates, Inc., of Stamford, Conn., are campaigning for a place in the early design stages of equipment development. Most government groups favor this new approach, but industry, in general, is skeptical.

 Machine vs. Operator—Industry seems to agree that more consideration should be given to the human factors early in the design process. But it doesn't think that design engineers are going to be happy about psychologists butting into the blueprint phase of

the problem.

For example, an engineer may be faced with the design of a submarine sounding room on a sub chaser. He finds out what equipment is needed in the room—sounding machines, plotting charts, all the rest of it. Maybe he figures that five men are needed in the room to do the job. He knows what equipment each must operate and what each one must watch. He can also find out who must communicate with whom. Then he can design the room. If he felt like it, he might call in a psychologist at this point to make the best of his layout.

• New Approach—Neither the government nor consultants now think this is enough. They think a complete operations analysis is necessary in the beginning so that the psychologists can attack their problems before the engineer ties down the design. An operations study of what's to be done in the sounding room would show that the most important thing is for the sounding man to pick up the noise from the sub. If he does not pick up the sound, the rest of the operation is of no value. So the efficiency of that man is of first importance.

The psychologist studies what the sounding man must do, determines what conditions he needs for efficient operation, and sets these up as primary specifications for the design engineer. Then the psychologist attacks the problems of the second most important man, then the third, and so on. When conflicts arise, such as that one man might need relatively bright light while another watching a scope may want it dark, compromises must be worked out. All this gives the engineer a series of specifications for best psychological conditions for getting the job done. And he must fit the equipment to the new restrictions.

• Roadblocks—So far, several things have kept the theories from working out in practice. In addition to opposition from engineers, industry has been reluctant to invest large sums of money in developing the human aspects of the problem. Industry essentially says, "We think it's a fine idea to study the human aspects of the problem, but it costs too much. If the government wants it included on this project, let the government foot the bill."

Then, in some cases when the government hires somebody to do the human engineering, the design engineer can find reasons why recommendations can not be carried out exactly as specified. He may use this as an excuse

to junk the whole idea.

 Liaison Needed—Consultants feel the the only answer to this problemis to develop liaison between the psychologist and the design engineer.
 Then they could work together on the necessary compromises. But with the government acting as an intermediary, there is no direct communication between the two.

The Army Bureau of Ordnance agrees with the consultants. It doesn't believe that the best answer is getting private consultant firms together with the design contractors. Instead, lass January, Ordnance set up a section to handle "Ordnance Human Engineering Activities." The group is doing most of its work at Aberdeen (Md.) Proving Ground. Although the section is just beginning to get under way, Ordnance is happy with its operation. In its proposed budget for fiscal 1954, beginning the middle of next year, Ordnance has made a specific request for funds to support "Human Engineering Activities in Ordnance."

Ordnance's philosophy is that the success of human engineering activities depends, upon the ability of the psychologists and the design engineers to get along with each other. By establishing a permanent group, hand-picked to undertake liaison along with technical problems, Ordnance hopes that design engineers and psychologists will learn to get along together.

• Simplification—The Air Force has been attacking the same problems through the Human Factors section of Air Research & Development Command. The Navy has done a lot of work through its own laboratories, has also used private consultants and college groups to solve some problems.

For instance, the Navy called in Dun-

lap & Associates to redesign flight maps for jet plane use. Pilots found the old maps were unsatisfactory at the speed and altitude of modern jet fighters. The planes went so fast that the area covered on existing standard maps was passed before a pilot could unfold the maps. Also, the maps covered many details of no value to high-flying jets.

Dunlap's study of the problem led to smaller maps covering much wider areas. Much information was omitted, and easier-to-read lettering was substituted. Local airports with runways too short or unsafe for jet landings were

left off the map.

. In Civilian Plants-What will happen to human engineering on industrial problems outside the field of military equipment? Most companies agree that an awful lot will have to be done. Chemical plants and steel mills are working toward automation with central control panels and switches that operate long and complicated production lines. Theoretically, if you put all of the necessary dials and controls on the panel, operators can keep the process going without problems. Practically, this isn't the case. The control panel has so many switches, dials, and lights that the operators can't tell what is wrong. Psychologically, people have a hard time adapting themselves to watch a mixed panel of controls continuously, and still note danger signals.

• Geared to Operator-The solution is to design the panel to fit the human. Again, study is necessary. One dial or set of dials may be far more important than any of the others. If this is true, they should be more conspicuous than others. If the operator is to take the information from two or three dials, combine it, and make a single decision, the psychologists say the dials should be combined to give him a single indication. They think the law of diminishing returns fits in someplace, too. Some dials may give information that is interesting or of some value, but of less value than their distracting effects. In these cases, the consultants sav junk the dials.

The military has also come up against this. A colonel in Ordnance put it this way: "We finally faced the problem of determining whether it was better to give a gunner enough information to make a hit on the first shot after studying for five minutes, or on the second shot after studying much less time. In increasing the probability of hitting on the first shot, the operation may be so complicated that under the old system one missed shot could have been fired and a second



When Four-Wheel Brakes Were Invented in 1908 . . . BRIDGWATER Was Already

Producing Under Sub-Contract Special

Machinery for Many Industries

★ Before the first four-wheel brakes, and before many other important "firsts" which marked the progress of manufacturing,

Bridgwater was relieving busy industries of much of their machining responsibilities by handling the fabrication of machined components and

complete assemblies.

Then, as today, manufacturers depended upon Bridgwater's reliable service and precision workmanship to enable them to devote more time, and a greater part of their plant facilities, to product improvement—and the development of new "firsts."





Unobtrusively, probably unnoticed, Rhinelander will be visiting your household frequently during the Christmas season. How come? Well, you see, many of the good things on your table during the holidays will come to you packaged in our G & G* Task Papers—fresher and tastier, too, for just that reason.

Modern Papers

for tough jobs and beauty, too



Printers and greeting card manufacturers are discovering Parchstone's ability to lend added beauty to their finest designs. Subtle, delicate contrasts of translucency and opacity give this genuine parchment an amazing elegance and richness.

Write for sample kit of the Parchstone line

*Glassine and Greaseproof—the functional papers that do so many tough jobs well.



hit scored while the computations were being made with the new controls."

 Slow to Change-Dunlap has made a study of electric utility control boards as a background for industrial application of human engineering techniques. But Westinghouse Electric Corp. says the biggest problem industry will face in proposing changes to utility control boards is inertia.

Most of the control board operators have been with their companies for many years. They don't want their operation changed. Some companies admit that proposed engineering advances in design of their control boards have been killed because of opposition

from the operators.

Even if the inertia were overcome, and the design engineers could be sold on the value of letting psychologists have a say, economics would get in the way. Meters and other utility control board equipment are cheap because industry has been able to standardize on design. Standard-size meters are available from almost any instrument maker. You can't increase or decrease the size of the meter by simply putting on a longer or shorter needle. It takes new engineering to change meter sizes.

If the psychologists say that, for more efficiency, two or three meters must be larger and two or three smaller, the meter manufacturers will have to reengineer their designs. This costs money, and unless there is a cooperative movement among industry to make the changes uniform the cost may be

prohibitive.

It seems impossible to get new standards accepted on a national basis. One large utility has already asked for larger meters so that they can be read easier by the operators. Another told Westinghouse that the control boards are so long now that roller skates should be used to get from one end to the other. This company wants smaller meters so the board will be smaller.

• The Vanguard—A few companies have had special boards made as a partial answer to the problem. Generally, however, they have used standard meters, expressing their individualistic ideas in colors or in placement of meters. Some publicity has been given to the special boards designed by these companies, but only a few of the other utilities have gone along with the changes.

• Some Hope—There may be an answer, though. Westinghouse suggests that widespread acceptance of human engineering in electric utilities will probably depend on the consultant engineering firms. They are in a position to influence the design of controls for the largest single segment of the industry. If enough companies go along with the consultants, the rest might fall in line.

PRODUCTION BRIEFS

ENIAC, the famous electronic digital computer at Ballistics Research Laboratory, Aberdeen Proving Grounds, Md., is getting a new memory unit so that it can tackle even bigger problems more quickly. The unit, designed and constructed by Burroughs Adding Machine Co., will increase ENIAC's memory power six times.

Continuous production of activated carbon from hardwood char has begun in the new Louisville (Ky.) plant of Girdler Corp. The company claims the continuous process produces carbon of uniform physical characteristics and high absorptive capacity.

An X-ray image amplifier, capable of intensifying an image of internal organs and movements 200 times, was demonstrated last week by its maker, Westinghouse Electric Corp. The machine uses two fluorescent screens to brighten the image. The amplifier does not affect the basic design of current X-ray fluoroscopic equipment; it is merely an attachment.

The Cosmotron, world's most powerful accelerator of nuclear particles, was officially dedicated Dec. 15 at Brookhaven National Laboratory. The machine, which is expected to deliver 2-million to 3-million electron volts on a routine basis for research, is used for studies of the nucleus of the atom and the forces which bind it together.

First big job of the new Colmar (Pa.) plant of Link-Belt Co. will be turning out custom-designed conveying equipment for Venezuelan iron ore. The handling system will unload, crush, screen, and store ore at the rate of 100 tons per minute.

Automatic controls may soon be taking over in the field of color sorting of fruits and vegetables. An electronic lemon sorter developed at the University of California (Davis Campus) can handle five lemons per second. Engineers expect to step up the rate to 15 or 20 per second on a model now being developed.

Three geological societies (Society of Exploration Geophysicists, American Assn. of Petroleum Geologists, and Society of Economic Paleontologists) announced a plan last week whereby the petroleum industry could combine uranium hunting with its normal oil exploration activities. The plan indicated that the additional expense of radiation tests would be justified by the likelihood of discovering scarce uranium.

Leading Producer of Wheels for Every Purpose, Offers ...

STYLE-PERFECTED WIRE WHEELS!



for Tomarrow's Cars of Greater Districtions

Skillfully designed! Radically improved over former American types, or even present-day importations! A major achievement to greatly enhance a modern car's entire appearance of custom styling, for those to whom pride of ownership is all important! Wheels of superior strength, safety and brake-cooling action, as well as for arresting distinction!





. ASSURES PROVEN PRODUCTS AT

DETROIT IZ MICHIGAN

PRODUCTS. Wheels—Hub and Doom Assemblies—Brakes—Vacuum Brakes Fower Unity—For Passinger Cars, Torks, Bussellorine, Bakes for House United and Light Commercial Trades—Wholes House, Britis, For Four Implements
PRANTS KIES—House Plants in Michael in Michael Palas Assembles Call Developed Lower Worlds: Online Canada

Empty...



8

all too often

There's an empty chair

at too many business conferences these days.

It's the chair that should be filled by the Traffic Manager...

whether it's purchasing or production,

sales or distribution ...

that's under discussion.

Having a Traffic expert on your top-level management team gives you an edge over competition. Many companies made that discovery years ago... and it's been paying off ever since.

You're the one who pays the freight...

even when you don't get the bill. For transportation costs are reflected in prices, not only for what you sell... but for what you buy as well.

That's why profit-conscious management is showing a more than passing interest in transportation methods and techniques, That's why, in many companies, the Traffic executive...call him the Traffic Manager if you like... is playing a more and more vital role in overall planning and operation.

Traffic Management has come of age

The day when the title "Traffic Manager" disguised a glorified shipping clerk is long past. For just as the Army has recognized the Science of Logistics, so has alert management come to recognize the Science of Traffic Management. And bigger profits pay tribute to their vision.



Chesapeake and Ohio Railway

TERMINAL TOWER, CLEVELAND 1, OHIO

The Chesapeake and Ohio Railway, as one of the great carriers of merchandise freight in the country, is vitally interested in any plan that will move more goods, more efficiently. That's why we sponsor this series of advertisements about the Traffic Manager and his job. The Traffic Man is management's answer to better and more economical movement of material.



Commercial Service Manager Praises Klixon Protection

YORK, PA.: William G. MacBride, Commercial Service Manager of the York Corp., was quick to give credit to Klixon Protectors for reducing their service problems.

"The application of a Klixon Inherent overheat Protector to the solenoid valve in our ice cube machine has unquestionably reduced our service problems on this equipment. Our experience with Klixon Protectors on our hermetic refrigeration compressors has been outstandingly good, also. We think a lot of Klixon Protectors."



The Klixon Protector illustrated keeps motors in electrical appliances and other equipment from overheating and burning out. Look for equipment with Klixon Protected motors.

KLIXON

SPENCER THERMOSTAT
Div. of Matel & Controls Corp.
2612 FOREST STREET
ATTLEBORO, MASS.

"LIGHT AS A BREEZE" DRAWER ACTION makes card filing easy



with "PEERLESS" 6608 3x5 Card Files

Besigned to take the fedium out of card filing. Peerless Cablests pramote more wark by mere-contented workers. Cablests are of attractive, medern design, sturdy and rigid construction. Drawers rall on bull. bearing gildes; won't say when filled. Earyadjustable fellower blocks. 10, 11 and 12 double compartment drawer sizes. Ask your dealer for Peerless or write us for illerature.

"PEERLESS"—Makers of top quality metal office equipment for nearly 25 years.



PEERLESS

STEEL EQUIPMENT CO.



JAMES MYERS, president of Cleveland Graphite, puts the emphasis on research as . . .

An Old Company Tries New Fields

To enter a technical industry, you buy a small company with the knowhow and dovetail it into your own setup.

The glamor industries—electronics, computers, high-frequency sound, high vacuum—have come in for a lot of publicity since the war. These flashy, highly technical, potentially profitable fields have attracted newcomers by the dozen. And more and more, the newcomers have found themselves side by side with companies from old-line fields, reaching out into the new techniques.

When an old-line company moves in, it often finds itself up against some new and unexpected problems. The first need, always, is to lay hands on a crew of technical men skilled in the new techniques. A popular answer to this problem is to buy a small, new company that's just emerging from the laboratory stage and starting into production. But that can create some new problems. The parent concern has to find ways of holding its new group together, integrating it into the existing business, getting the most use out of it.

All of this happened to Cleveland Graphite Bronze Co., an old-line company that has moved into a variety of promising fields. Early this year it bought Brush Development Co., a small but fast-growing Cleveland electronics outfit. In order to dovetail the new company and the new field into its regular operations, Cleveland Graphite

has now announced that it's going to reorganize its entire corporate setup. The new company will be called Clevite Corp.

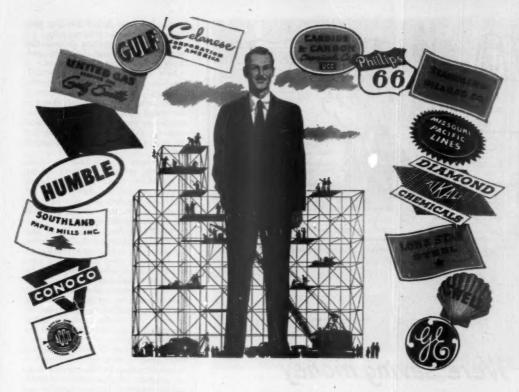
 Others—Cleveland Graphite hasn't been alone in the practice of branching into new fields by buying companies in those fields. Here are a few random examples of like cases;

 Remington Rand, Inc., got into the computer business by first buying Eckert-Mauchly Computer Corp., later acquiring Engineering Research Associates (BW-May3'52,p38).

 Consolidated Engineering Corp. (BW-Nov.15'52,p170) branched out into the highly specialized field of high-vacuum techniques by buying the Vacuum Equipment Dept. of Eastman Kodak Co.'s Distillation Products Industries (BW-May24'52,p38).

Allegheny Ludlum Steel Corp. and National Lead Co. decided titanium metals looked promising, formed Titanium Metals Corp. of America. Later, urged by the same motive, Remington Arms Co., Inc., and Crucible Steel Co. of America got together and organized Rem-Cru Titanium, Inc.

• Mutual Benefit—Most of these mergers have had one characteristic in common: The big parent companies have had the manufacturing and sales ability, but have been short on ideas. The small outfits have been heavy on



How to Build Satisfied Clients!

We don't intend to brag... but we do like to talk about our satisfied clients. In their ranks are listed the greatest names in American industry. Their fields of endeavor vary from the chemical industry to the petroleum industry—from electric utility plants to gas transmission—from railroads to the construction of complete municipalities.

Backed by almost 40 years of diversified experience in heavy construction, Brown & Root has the know-how to complete your proposed project faster... more economically.



BROWN & ROOT, Inc. Engineers Constructors

CABLE ADDRESS - BROWNBIL

Associate Companies:- BROWN ENGINEERING CORP. . BROWN & ROOT MARINE OPERATORS INC



We're saving money on our GROUP INSURANCE

That's because the Company with which we do business knows how to hold down administrative costs. Undoubtedly that is one reason why you will find more businesses Group Insured in the Ætna Life Insurance Company than in any other company. And there are other equally significant reasons. They have Home Office Representatives on the spot who are as familiar with local conditions as you or I. Their claim organization has nationwide facilities and an unexcelled reputation for prompt, efficient handling of claims. They've pioneered the field of employee benefit plans and they know it from A to Z. I know it will pay you to call their nearest office or write to:



Group Division

ÆTNA LIFE INSURANCE COMPANY
Hartford 15, Connecticut

brains, but have lacked the big production and volume sales capacity.

That was the pattern behind the merger of Cleveland Graphite and Brush Development Co. this year.

 New Fields—Since 1919 Cleveland Graphite has been producing chiefly bushings, bearings, and related items for the automotive industry. Being a one-market company, it was highly susceptible to the ups and downs of that market. When the auto industry slumped, Cleveland Graphite slumped with it.

After years of this kind of uncertainty, the company's officers—led by its president, James L. Myers—began looking around for new fields. If Cleveland Graphite was ever to stand on its own feet, they realized, it would have to start branching out.

• Weak Link—Soon after, Myers and his associates realized that if the parent company were to keep on expanding, it would need a more efficient, less centralized type of management. But to round out the company's aims and make the decentralization plan work, it still needed one more egg in the basket. It had strong manufacturing units, but its research was confined to its rather limited fields and therefore so were its product possibilities.

Early this year Cleveland Graphite found the missing egg. It acquired Brush Development Co.—world's largest producer of piezoelectric material and an important factor in applications of high-frequency sound, in electronics, and in measuring devices (BW–Jun. 16'51.p44).

• Two-Way Gains—It was easy to see why Cleveland Graphite grabbed up Brush at the first opportunity. With it, the company got a whole list of entirely unrelated products. More important, it got (1) the Brush brains, a carefully built-up staff of top scientists and engineers; (2) further diversification; (3) the needed unit that would make decentralization of Cleveland Graphite practical—almost a necessity; and (4) a basketful of patents held by Brush Development.

It was harder to see why Brush wanted to sell. It was just starting to take advantage of the efforts of Brush Laboratories, started in 1921 by Charles F. Brush, Jr., a contemporary of Edison and Westinghouse in the electrical field, to research the properties of piezoelectric crystals, metals, and other

Actually, Brush had two good reasons for selling the way it did—on a \$7-million exchange-of-stock deal. Brush had grown so fast that it was face-to-face with the necessity of acquiring, through what it knew would be painful experience, the knowhow of volume production and sales. Secondly, the sale gave the owners, most of whom

were active in management, substantial stock interest in a widely held and

well-managed company.

• Hands Off-Management and production men at Cleveland Graphite knew little about production of piezoelectric material, electronic measuring devices, or ultrasonic energy when they took over Brush Development. So they let Brush continue manufacturing on its own, under the banner of The Brush Electronics Co., with management still under scholarly and dignified W. Russell Burwell. Cleveland Graphite made him chairman of the research and development committee of Clevite Corp.

• The Setup-Thus, the company has done just what it started out to do. The officers of Clevite Corp. will take care of central management and coordination. Under them are the operating units-Cleveland Graphite, Harris Products, Brush Electronics, and Clevite, Ltd., a Canadian unit. These companies, together, supply the manufac-turing and sales knowhow. Alongside them will be Clevite's technical experts, gathered into Brush Laboratories Co. This new company, with a staff of 100, will do nothing but research.

· A Wide Berth-Clevite will put no fences around its researchers-they'll be free to explore any field they want to, as long as the marketing group can see a sales possibility and as long as product development goes along with any proposed project. Product development will be the baby of another newly created unit-Clevite-Brush Develop-ment Co., under the leadership of A. L. W. Williams.

Cleveland Graphite is planning to build a new, suitable home to house its research groups-which will be an incentive for the 100 top researchers to stav on with Clevite. One thing is certain: Cleveland Graphite won't be

outbid for a good man.

· Sky's the Limit-There's no limit to what these scientists and engineers might come up with for Clevite. Among other things, they are kneedeep in transistor development; in researching a specialized titanium powder that would simplify machining and reduce scrap loss of products; and in further applications for their ultrasonic energy equipment, which now concentrates acoustical energy to stimulate or destroy bacteria, transform chemical compounds, clean metal, cmulsify oil-soluble or water-soluble

Clevite Corp. will oversee all of these activities. Its 21 staff members will handle financing in each of the units, over-all control in measuring performance, policy, legal and tax matters. The central staff of Clevite Corp. will be anything but a haven for unwanted or superannuated officers.



Steel-strapped pallets at Locke Department of General Electric Company.

Packing expense cut 35% by **Brainard Strapping Service**

THESE porcelain insulators were formerly packaged in individual cartons. Then Brainard strapping salesman Edward Rose of Baltimore, in cooperation with his customer's Packing Engineer, developed this method of loading groups of insulators on a returnable pallet, and securing the entire unit with Brainard steel strapping.

Excessive breakage of pre-vious fasteners used has now been eliminated, and packing expense cut 35%.

Developing improved methods of materials handling and shipping is a standard service of Ed Rose and his fellow Brainard salesmen. They are qualified to study your operations, then recommend and demonstrate the most efficient system for you.

Call your nearby Brainard sales-man for top-notch service in steel strapping. Offices located throughout the U. S. In Canada: P. J. McArthur Company, Toronto.



COMPLETE STEEL STRAPPING SERVICE, LIGHT AND HEAVY DUTY STRAPPING, TOOLS AND ACCESSORIES



Write for illustrated catalog. Brainard Steel Division, Sharon Steel Corp., Dept. P-12, Griswold Street, Warren, Obio

WARREN, OHIO



50% FASTER FILING with Oxford PENDAFLEX®



ABOVE: No papers can be filed without laborious search through old style filing folders.

BELOW: The desired PENDA-FLEX hanging folder is found instantly and papers filed in half the time!



Mail coupon for more information.

Oxford Filing Supply Co., Inc. 66 Clinton Road, Garden City, N. X. Please send Pendaflex catalog and name of desire who will make a TRIAL (money back) INSTALLATION.

NEW PRODUCTS



Sharpening Carbide Tools

One of the most publicized material shortages this year has been that of industrial diamonds (BW—Sep.13'52, p190). Diamonds were about the only thing able to sharpen superhard metals used in tools for jets and other industrial items. Engineers have emphasized conservation and reclamation, looked for new methods that require less diamond bort (powder) or none at all.

This week Behr-Manning Corp., of Troy, N. Y., and Fenlind Engineering Co., of Rockford, Ill., announced a new device that they say does the grinding job without a diamond wheel. The companies claim that their method costs about two-thirds less per tool sharpened than the conventional method and produces a longer-lasting cutting edge on the tool.

The grinding element for the new machine is a coated abrasive belt that travels over a 14-in. cast-iron wheel specially formulated for extreme hardness. With the new method, the intermediate grind and the finish-honing operations can be eliminated. The new machine goes directly from the roughground stage to micro-finishing in one operation.

• Advantages—The makers of the new machine feel it's important to the metal-working industry for two reasons: (1) It may help alleviate the critical diamond shortage, and (2) it may make tungsten carbide cutting tools available to an estimated 60,000 small shops that can't

afford diamond wheels to sharpen them. The new machine, called the Fenlind Micro-Finisher (Model 13), uses a waterproof silicon-carbide paper belt (Speed-wet Durite). The belt is joined by a patented process so that there is no ridge. A belt lasts for 50 to 75 sharpening jobs, costs about \$1.50. Replace-

ment is simple; the motor drive-end

moves forward, and the new belt slides right on.

The height of the worktable can be adjusted in relation to the contact wheel so that you can grind any normal relief angle on the carbide cutting tool. Light manual pressure does the rest. No edge of the cutting tool need be held against the belt for more than two or three seconds.

• Source: Fenlind Engineering Co., Rockford, Ill.

· Price: About \$485.

Cheaper Separators

Evans Products Co., a major producer of wooden separators for automobile batteries, has found a way to make the separators from wood chips and dust previously wasted. Along with conserving lumber, Evans says the wood fiber separators outperform conventional wooden types, and are less expensive.

Separators, which are used to separate positive from negative plates in a battery, have to be porous, yet nonconductive. Almost all of them are made



Oftentimes rivaling their contents, colorful Christmas wrappings become more festive every season. These specialty papers provide visual proof of the skill and imagination that goes into the manufacture of all paper today.

Now in its 60th year of service to the pulp and paper industry, Mathieson supplies more essential chemicals than ever before. Caustic soda, soda ash, bicarbonate of soda, liquid chlorine, ammonia, sodium chlorite, sulphur, nitrate of soda, ammo-

nium sulphate, sulphuric acid, hypochlorite products, diethylene glycol and triethylene glycol . . . Mathieson is the only manufacturer that can supply all these chemicals.

A dependable source of basic raw materials is always important. If your production requires these chemicals—or any of Mathieson's many organic, inorganic or agricultural chemicals—you may be able to buy to better advantage by consulting with us now.





COSTS GO DOWN AS LOADS GO UP

Halt rising production costs. Make your load handling tops in efficiency. Use the "Series 700" Load Lifter. This fast, powerful electric hoist lifts a ton one foot in two seconds at the push of a button.

Heat-treated helical gears, steel suspen-sion, quick-acting load and motor brakes, non-fracturing load hook, only 24 volts at the push button—all these features assure dependable service and complete safety for man, load and hoist.

Boost defense and civilian output. Put the time and effort-saving Load Lifter Electric Hoist to work in your plant. Capacities: 1000 lbs. and up. Write for factful Bulletin 399.





MANNING, MAXWELL & MOORE, INC.

MANUNING, MAAW ELL & MOURE, INC.
Muskegon, Michigan
Builders of "Shaw-Box" Crases, 'Budgit' and
'Load Litter Hoists and other litting specialties.
Makers of 'Ashcroft' Gaures, 'Hanesek' Valves,
Makers of 'Ashcroft' Gaures, 'Hanesek' Valves, and
'American' Industrial Instruments.



YOUNGSTOWN STEEL CAR CORPORATION

NILES, OHIO

Large scale producers of . . . big weldments on a production basis - die pressed channels for bus, truck and trailer chassis — railway cars, repairs and parts - miscellaneous heavy presswork.

BUSINESS OPPORTUNITIES

may be either offered to, or solicited from America's management men through BUSINESS WEEK'S own classified advertising section . .

of natural wood with a straight, flawless grain. Evans says its fiber separators are all wood, in a purer form than nature can produce. Tiny chips are cooked and passed through several purifying processes. The finished stock comes out in a continuous strip.

Using the chips, Evans expects to get three times as many separators from a

That's a big reason why the Evanite parators will run about \$8.50 per 1.000 compared with \$8.85 for natural wood. They are also cheaper for battery manufacturers to handle since they can be shipped dry, require no "candling," or wet storage.

· Source: Evans Products Co., Plymouth. Mich.



Sprinkler Plus

To scatter water spray more efficiently for fire control, sprinklers from "Automatic" Sprinkler Corp. of America now have an added feature. It's the circular "built-in" deflector pointed out by the pencil in the picture.

The company developed the mechanism as part of a new approach to fire fighting adopted by fire insurance companies and the sprinkler industry. For years, the theory was that automatic sprinklers should direct about 60% of the water upward against the ceiling. Water deflected by the ceiling forms big drops and some steady streams.

Now tests have shown that the best way to extinguish the flames is to throw a spray that's more even throughout, made up of drops of varying sizes, including fine mist. It should be directed outward and downward rather than upward.

The company says its latest design does the job. It comes in two styles, for mounting on exposed pipes or attaching to the ceiling where piping is concealed.

· Source: "Automatic" Sprinkler Corp. of America, Jones & Brittain Sts., Youngstown 1, Ohio.



Steel for Small Buildings

Usually, you don't use steel for the studs and joists of a house or a small building; it's too expensive. But now Penn Metal Co., Inc. New York, is introducing a line of lightweight steel sections that it says will do the job economically.

The sections, fabricated from strip steel by cold rolling, are designed for custom framing. They can be cut and

welded in any design. The sections are available in standard widths (31 in., 4 in., 6 in., and 8 in.) in 14- and 16-gauge steel. Single sections can be spot welded back-to-back for heavy loads and long spans. The crisscross pattern gives strength and lightness. In addition, the openings simplify through-frame installation of wiring and plumbing.

• Source: Penn Metal Co., Inc., 205 E. 42nd St., New York 17, N. Y.
• Price: Single beam, 3\ddot in., 14\psi per ft.

To Strengthen Plastics

A new glass fabric called Form-Fab has been developed by Hess, Goldsmith & Co., Inc. The fabric can be stretched up to 70% in any direction, although the varns themselves do not stretch. In effect, the weave opens up but the count (number of yarns) is so high that texture seems the same. It has been developed for use as a reinforcing agent for plastic parts with compound curves.

The company sees uses for its fabric in such products as aircraft wingtips, radomes, automobile fenders, boat hull sections, luggage, heavy-duty helmets.

The fabric is made in three thicknesses: 0.009 in., 0.012 in., and 0.018 in. Average weight of the medium-thick fabric is 11.79 oz. per sq. yd. The company reports that strength tests on this thickness show an average breaking load of 567 lb. per in. of width in the

warp (lengthwise) and 349 lb. per in. of width in the filling (crosswise).

Source: Hess, Goldsmith & Co., Inc., 1400 Broadway, New York 18, N. Y.

NEW PRODUCTS BRIEFS

A stereo-microscope brought out by Edmund Scientific Corp., 161 E. Gloucester Pike, Barrington, N. J., is inexpensive (\$75) and can be used for any inspection work-examining, counting, checking, dissecting.

A 6-lb. occasional chair, introduced this month by Andreef Chairs, Inc., Rouses Point, N. Y., is the forerunner of a complete line of furniture using du Pont nylon-cord construction. Back and seat of the chair are horizontally strung nylon cord; the frame is made of laminated wood.

An overhead traveling carrier equipped with a hydraulic cell scale has been built by Cleveland Tramrail Division of Cleveland Crane & Engineering Co., Wickliffe, Ohio. It permits quick and easy weighing of loads.

A portable hardness tester for metalproducing and metalworking plants is made by Newage International, Inc., 235 E. 42nd St., New York 17, N. Y., You place the device on the metal to be tested, press downwards on handgrips, then read the scale.

A heat cabinet, which dries hands by ultraviolet rays when you break a beam of light from an electric eye, is being introduced by Electronic Towel Corp., 342 Madison Ave., New York, N. Y. The device eliminates coils, pedals, and buttons. The company says that Pine Oil and Chanel No. 5 scents can be used with the cabinet to enliven the washroom.

An automatic agitator for color or blackand-white film processing has been introduced by Oscar Fisher Co., Inc., Peekskill, N. Y. The new unit is hydraulically powered, with no electrical connections or motors to short and cause electric shock. The manufacturer says automatic agitation assures uniform processing of successive rolls of film without streaking or unevenness.

A vinyl resin for the plastic film and sheeting industry, called Marvinal VR-21, has been announced by Naugatuck Chemical Division, United States Rubber Co., at Painesville, Ohio. It will be used primarily in such products as shower curtains, drapes, upholstery, luggage, pocket books, and inflatable toys.



While you may not have heard our name, Otis, McAllister & Co. has long been known to American roasters famous for the world's finest coffees. With 16 affiliated offices in Central and South America, we have been a dependable source for fine coffee since 1892.

Coffee is the economic life blood of many Latin American Republics. Coffee means dollars to these countries—enables them to buy—and Otis to assist in selling many famous American products, such as: Sun-Maid Raisins, Pillsbury Flour, Kellogg Cereals, Evangeline Hot Sauces, Dennery Bakery Supplies, Armour Meat Products, Golden State Milk, to mention a few.

OTIS, MIALLISTER & CO.

Established 1892

Importers of Selected Quality Coffees
Exporters of Leading American Products

SAN FRANCISCO · NEW YORK · NEW ORLEANS CHICAGO · LOS ANGELES · TORONTO



SPECIAL REPORT

Per Capita, 1928 = 100

It Leaves Little for Consumption

3250 **—**

3000 -

2750 -

2500 **—**

2250 -

2000 -

1750 -

1500 —

1250 -

1000 -

7·50 -

500 -

250 **—**

100 -

1928

1933

1937

WARYEARS

WARYEARS

1

1945 1947

1952

INDUSTRIAL PRODUCTION
has doubled since war



CONSUMPTION gets short shrift still

BUSINESS WEEK REPORTS TO EXECUTIVES:

Why Russia Is Caught In an Economic Trap

In 1917—in one of history's most fateful revolutions—the Communists seized control of Russia. They took over a huge and potentially rich country that sprawled for 7,000 mi. across the Eurasian land mass.

Though the Russia of 1917 ranked among the great powers, economically it was a backward country that had been touched only recently by the industrial revolution. Except in the western part, Russia's vast resources had

scarcely been tapped.

Today, just 35 years later, Communist Russia has an economic and military potential second only to that of the United States. It ranks with the U.S. as one of the world's two Super Powers. It dominates a Communist bloc that takes in Eastern Europe and China and contains, all told, about 800-million people. It is the one country in the world with power enough to challenge the United States for world leadership, even to threaten the very security of this nation.

• Unmeasured Strength—By now, most Americans recognize Communist Russia for what it is—a powerful and implacable enemy of our way of life. But in most respects the Soviet Union is an unknown country except to the Russian experts in Washington and in

our universities.

To get a real measure of the power that challenges us, it is necessary to find the answers to questions like these: What kind of society has Stalin built in Russia? How strong an economic and political base lies behind Russia's formidable military front? Can Russia, under communism, hope to match American strength?

The Structure

The main features of the society built in Russia by the Communists can be put into focus this way:

Government: A totalitarian dictatorship, headed by Stalin and a few henchmen, which rules ruthlessly through a tight party machine, a ubiquitous secret police, and a vast state bureaucracy.

Economy: A lopsided state monopoly, dominated by heavy industry, most of it geared to the Soviet war machine. Basic industries like steel have grown under forced draft since 1928 at the

expense of agriculture and of consumergoods output.

Society: A pyramided social structure, which reflects the political and economic setup. The bulk of the Russian people aren't consumers in the American sense; they live on whatever ration the state allows them, while the members of the state apparatus get a relatively good living.

tively good living.

War industry: The chart on page 94 shows the social cost of rising expenditure on the Soviet military machine. Since 1937 the percentage of the industrial product consumed by Soviet war industry has gone up from just under 20% to somewhere near 40%. (During World War II, of course, the figure was much higher than now.)

• Contradictions—This totalitarian so—Contradictions—This totalitarian so—

On the one hand, Communist Russia has the technical knowhow to produce atom bombs and to build fighter planes that rank with the best U.S. aircraft. Also, it has the industrial capacity to produce 38.6-million net tons of steel a year, nearly as much as produced by Britain, France, and West Germany combined.

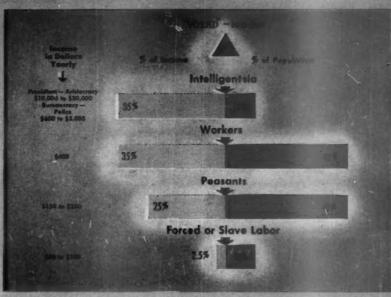
ciety is full of unbelievable paradoxes.

On the other hand, living conditions in Russia are incredible, by Western standards. An Italian journalist, V. J. Rossi, who traveled extensively through the Soviet Union in 1951, summarized his observations this way: "The impression of things as they are is an impression of misery. On my whole long journey . . . I did not see at the railroad station a single person, man, woman or child, dressed at all comparably to worker or peasant making a trip in the West. Their clothing, their faces, the things they carried—everything spoke of wretchedness. Looking around for some comparison with people from the West, I could only think of Italian emigrants of 50 or 60 years ago from our poorest provinces."

Add these things up, and you can see why the rulers of Communist Russia are driven to expand their power at home and abroad, forced to talk up a foreign enemy whether one exists or not, and prevented, perhaps perpetually, from making any fundamental social or economic changes, such as a switch from armaments to consumer goods, lest thereby they undermine the foun-

dations of their power.

Russia's
Totalitarian
System has
Produced a
Social Structure
Like this



Evolution of the Totalitarian State

To understand how Russia got this way and where it stands today in economic terms, you have to go back to the years just after the Bolshevik revolution.

• Early Days—Once the Bolsheviks took up arms against the Democratic Republic, a dictatorship was inevitable in Russia, for the Bolsheviks faced not only civil war and foreign intervention but the stark fact that they represented only a tiny minority of the Russian people. What's more, they soon faced an almost impossible economic situation. Their experiment with "war communism," under which private production and trade were wiped out, brought economic chaos.

The switch to the New Economic Policy in 1921 (NEP brought a return of private trade) relieved the economic distress, but revived the "capitalistic sector of society," which could easily have become a threat to the Soviet regime if it had been allowed to flourish for too long.

 Totalitarianism—After Stalin fell heir to Lenin's mantle in 1924, the dictatorship soon became the totalitarian superstate we have today. Stalin operated on the principle that force is the decisive factor in both political and economic affairs. Under Stalin, then, the security of Soviet power came to rest on the highly disciplined Communist Party, a constantly growing state bureaucracy, a ruthless secret police, and a complete state monopoly of the economic activities of the country. And from the beginning Stalin relied, as he still does, on the threat of capitalist encirclement—at times in Soviet history a reality, though more often than not a myth—to justify his "organs of suppression." The cold war is a domestic necessity as much as it is an instrument of Soviet foreign policy.

 Bureaucratic Octopus—In the process of consolidating his power, Stalin built what is today the biggest and most expensive administrative structure in the world. This octopus really began to grow between 1928 and 1933, when Stalin collectivized Russian agriculture and at the same time launched Russia on the road to industrialization with his first Five-Year Plan.

This double operation involved the expropriation of some 80-million peasants and the shifting of 10-million to 20-million people toward the new centers of industry. In the process, Russia suffered a disastrous famine, which took at least 4-million lives. At the same time the output of consumer goods just about dried up.

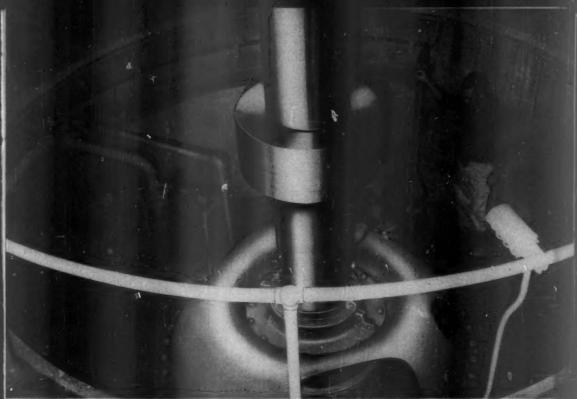
The administrative overhead kept mounting as Stalin moved from one Five-Year Plan to another. The growth of armament industries during the 1930s carried the process even further. And the social tensions created by the overheated pace of industrialization forced Stalin to increase his secret police fivefold.

By 1939 the police army totaled 1.5-million men. (It's present strength is estimated at 2-million.)

• Still Growing—It's a safe guess that today the entire administrative machine in Russia—party, state bureaucracy, and state police—takes in more than 20-million people, if you include families (chart, above). This group consumes a big share of the disposable national income. It constitutes one of the main reasons why there is so little investment capital available in Russia for agriculture and for consumer-goods industries.

There's no doubt either that this bureaucratic octopus will continue to grow. Stalin said as much just before the Communist Congress that was held in Moscow in October. The great industrial expansion projected in the current Five-Year Plan apparently will require a parallel expansion of the state apparatus.

Thus you have a situation like this in Russia today: From Stalin down through the bureaucracy, those who hold power are committed to the perfection of the dictatorship. Equally, they are committed to perpetuate the concept of Russia as a country that is constantly threatened by the capitalistic enemy. And the millions of people who form this structure must at all costs defend this theory of Russia's position. Without it, they would be superfluous.



6-TON SHAFT reaches down to one of the six giant Worthington centrifugal pumps that lift 2,000,000 gallons of Sacramento River water 197 ft every minute.

6-ton "muscles" for the biggest irrigation project ever undertaken



HUGE VOLUTE CASING of one of the Tracy Plant's 84-inch Worthington pumps being assembled inside a concrete form. The next step was to completely imbed it in concrete.



The job was literally to lift a river. In the Central Valley of California, the Sacramento River has a super-abundance of water. The San Joaquin Valley, with its potentially rich farmlands, thirstily needs every drop it can get. The big catch was moving water from one to the other.

The solution? Lifting two million gallons of Sacramento River water 197 feet every minute. This is the largest massmovement of water ever attempted. It is made possible at the Tracy Pumping Plant by six Worthington 22,500-horsepower pumps, so huge their shafts weigh six tons apiece. Such pumps could fill an ordinary 100,000-gallon city water tank in just three seconds.

So sure were the engineers on the job of the in-built soundness of these pumps

workman. Three such lines carry the river's water about a mile upgrade to the Delta-Mendota Canal which flows into the San Joaquin Valley.

that they had them completely imbedded in concrete!

Worthington experience, design, and manufacturing facilities are always ready to assist in the solution of civil, mechanical, or industrial engineering problems. Write us about your needs. Worthington Corporation, Harrison, New Jersey.



AN CONDITIONS AND REPROPATION - CONTRIBUTION OF THE STATE OF THE STATE

Russia is ferging ahead in heavy industry like this, has fairly advanced technology, but . . .





The people pay the cost in low living standards. Postwar model housing looks like this in Moscow.

Investment: a Political Operation

The second basic element in the Soviet scheme of things is the concentration on heavy industry. You can get some measure of how lopsided the Russian economy is from the chart on page 100. It shows that the output of capital goods this year will be about 76% of total industrial output, consumer goods only 24%. In the United States almost exactly the reverse is true.

You can see the same thing in the way the Soviet government allocates investment between the various sectors of the economy. A secret Russian plan, captured early in World War II by the German army, gives a breakdown for industrial investment in 1941. Of the total investment, 26% was for coal, oil, and electric power; 17% for iron, steel, and nonferrous metals; 9.5% for the metalworking industries; 4% for chemicals; 25% for aircraft and other arms; and only about 4.5% for all light industries.

Western experts on Russia figure the 1952 breakdown roughly matches that of 1941, except that an important chunk of investment must now be allocated to atomic development projects.

• Working Money—Contrast the process of investment in the U. S. with that in Russia. Here industrial investment is governed mostly by consumer demand, to some extent by government projects such as the mobilization pro-

In Communist Russia, industrial investment has been a planned political and military operation. Industry was superimposed on an agricultural economy, not to satisfy the needs of the Russian people but to meet the needs of the Soviet rulers. Back of the concentration of investment in heavy industry lie the two basic motives that drive the Soviet in all its activities:

(1) The obsession with maintaining power at the top. In Stalin's economic philosophy the "giant plant" is important partly because it is industrial concentration that secures his dictatorship against all internal opposition.

Stalin has put the problem this way: "There are plenty of small plants all over the world. Such small plants contain, produce, and create capitalism and bourgeoisie daily, hourly, and on a vast scale."

(2) The conviction that only military superiority can guarantee the survival of the Soviet Union.

From the very beginning of his industrialization drive, Stalin had the problem of obtaining the capital needed to build heavy industry. In the U.S., that has never been a real problem. In the early days of our industrial growth, British and European capital came only too willingly to this country. Then, as time went on, the U.S. economy was productive enough to produce not only a rising standard of consumption but large private savings that could be invested.

But in Russia, the very nature of the Communist system closed the door on both foreign capital and private accumulation at home. So industrial investment in Russia has had to come out of the hide of the Russian consumer.

True, Stalin got a sort of substitute for foreign investment from the trade policy he pursued between 1928 and 1933. In these years, most of the machinery for Russia's new industries was imported. But Russia paid a high price for these imports. On the one hand,



NYLON TAKES THE STARCH OUT OF A FILTER PROBLEM

This producer of cornstarch had a problem with the filter cloths he used to remove starch from a liquid solution. They would clog up with starch after only 3 days' use—the water couldn't filter out. He changed to filter cloths made with Du Pont nylon fibers and found they could be used for 30 or 40 days before they plugged up.

When filter cloths clog with starch, equipment has to be stopped for the cloths to be cleaned or replaced. When this was done every 3 days, it meant wasteful downtime, slowed production.

By using nylon cloths, the producer raised his starch-filtering rate at least 20% . . . and without the purchase of any new equipment. The answer: starch just doesn't stick as readily to fine, smooth nylon fibers.

The filter cloths of resilient nylon lasted about 10 times longer than the previous cloths. They were easier and more quickly cleaned with pressure hoses...and with little risk of tearing.

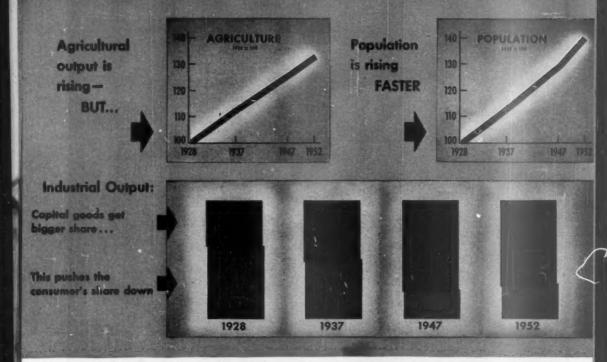
Nylon is now being used in a wide variety of products—fishing nets, rope, sewing thread, and many others. Perhaps nylon can help you speed a production process . . . improve a product
—or even create a new product.

NEW BOOKLEY. "Nylon Textile Fibers in Industry" contains 23 case histories, shows you how business men are using nylon in industry today. Write for your copy. And tell us your fabric or fiber problems. Address Textile Fibers Department, Room 2498-B-13, Nemours Bidg., E. I. du Pont de Nemoura & Co. (Inc.), Wilmington, Delaware.



Du Pont fibers are planned for better living

HYLON
ACETATE
ORLON°
acrylic fiber
RAYON
DACRON*
polyester fiber
*OU POUT
THADR-MARKS



the government depleted its forest reserves and manganese deposits in the search for acceptable export goods. On the other, it exported grain in the midst of famine at home.

• Robbing Peter . . . — Collectivization of agriculture provided Stalin with another source of capital. Food was forcibly extracted from the collective farms to feed the workers in the new industrial centers. For the bulk of this food the Russian farmer got paid little or nothing in the way of consumer goods. In a very real sense Russian industry grew within the new agricultural environment as a feudal city fattened off the surrounding villages.

But Russia has had to pay a price for this form of capital accumulation, also. Apart from causing the loss of about 4-million lives, forced collectivization brought a widespread destruction of agricultural capital, which is still a mortgage on the Soviet economy. Western experts estimate that all the investment in agricultural machinery under the first two five-year plans fell far short of compensating for the destruction of farm animals when the Russian peasant resisted collectivization.

• Alternatives—Under the Soviet system there have been actually only two methods open for the accumulation of capital: (1) the continuous curtailment of consumption, whether in the form of food, clothing, or housing; and (2) the use of slave labor.

• State Takes All—What's happened to Russian housing since 1928 provides a good example of how capital has been progressively concentrated in the hands of the state through restrictions on consumption. In 1928 city dwellers in Russia had none too much living space—only 60 sq. ft. (half a room) per person. But even this shrank once industrialization got under way. By 1937 housing space per person had dropped to 50 sq. ft. or less, by 1948 was reduced to 45 sq. ft. Today the figure is probably even lower than that.

No such precise figures are available when it comes to over-all consumption of food and clothing. But estimates show that real wages of industrial workers fell by 10% between 1928 and 1939, even after allowing for Soviet social benefits. During World War II there was an even sharper drop. Today real wages are probably back to the 1939

level or a little higher, but still below 1928. As for the Russian peasant, it's estimated that his standard of living has fallen well below 1928.

The most important fiscal instrument used by the Soviet government for restricting and channeling consumer goods is the turnover tax. This tax accounts for over 50% of the receipts of the state budget. Of the total revenue derived from the sales tax, 90% comes from consumer goods, including food, and 10% from capital goods.

• Doubtful Bounty—You get an idea of how the consumer fares from the way the national cake is cut in Russia. In 1928 expenditures on personal consumption represented some 75% to 80% of the gross national product. By 1940 consumption had dropped to less than 60% and by 1948 to well under 50%. Today it's probably not more than 50%. During more than two decades of rapidly expanding production, consumption has hardly risen at all.

Agriculture-a Weak Link

Stalin has promised the Russian people a 40% to 60% increase in consumer goods by 1955. But that increase is tied to a 55% boost in productivity and a 70% boost in total production, neither of which is likely to be reached. In any case, part of an increase in the output of consumer



"The Fastest known Way to Produce Paychecks." The all-electric Accounting Machine and a smaller stub-check form save 50 to 75% of clerical time. ABSCO



"The Remington Rand Electronic Sorter."
Remington Rand's unique electronic
punched-card sorter gives you unheardof speed: 800 cards per minute. TM156



"Univac Fac-trenic System." 20-page brochure shows how this high-speed electronic "brain" may be of practical use in your business. EL100



"Type Right Through Nylex." New allnylon typewriter ribbon gives lowered costs through increased operator output ...clearer printwork too: RSR141



"Yes! I'm an Electric Typist." An attractive package offer by which schools can provide the facilities to teach electric typing. R516



"Purchasing Pracedures to Save Time and Money." Here are modern methods time-tested and proved profitable by purchasing officials of leading firms. X1202



"Mechanize New ..." Savings of 40 to 60% made possible by Remington Rand's versatile Foremost, the easiest to use of all accounting machines. AB423



"New Tempe in Figure Preduction." Now you can handle all office figure work on one machine with printed proof of accuracy for every computation. ACS39



"Hew to Simplify Year Files." This complete 38-page booklet offers many practical money-saving hints from our 75 years' experience. LBV398

Read 'em and Reap!

These are just a few among the hundreds of booklets offered free by the Management Controls Reference Library of Remington Rand...to help you cut costs and/or add to your company's gross income.

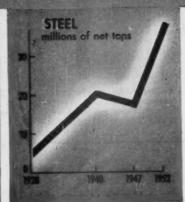
Some have to do with simplified methods—ways that you can cut out needless paper work and at the same time have complete facts and figures at your command, as a basis for effective management control. Others show how to get greater clerical output from office machines and equipment. And most contain interesting case history information citing

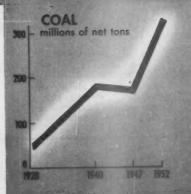
proof of results obtained by companies whose problems are similar to yours.

Please check through the titles carefully and let us know which you'd like to have. There's no obligation, of course. Just phone or visit the nearest Remington Rand Business Equipment Center or write to Management Controls Reference Library, Room 1533, 315 Fourth Ave., New York 10.

Remington Rand

These basic industries have grown explosively in 25 years

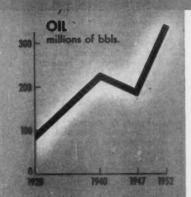


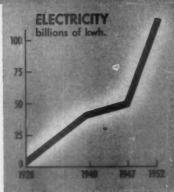


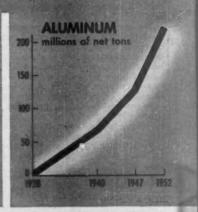
For ten yours
expansion has
concentrated dast
of the Urals,
producing this
economic pattern

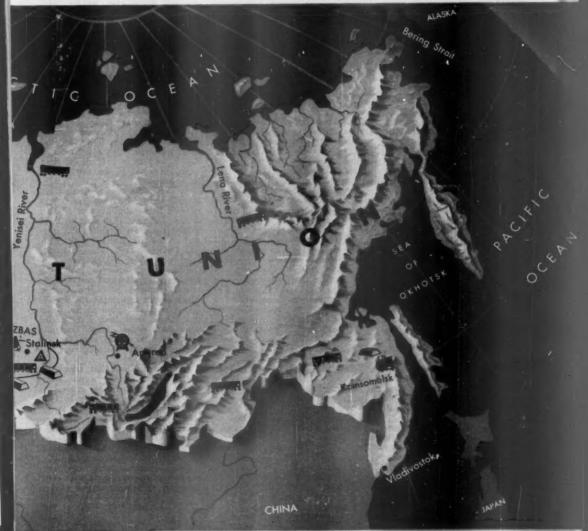
- STEEL REGIONS
- ALUMINUM
- OIL REGIONS
- HYDRO POWER
- MAN COAL
- **RON**
 - MANGANESE
 - BAUXOTE











goods is sure to go into state stock-

piles

Whatever happens on the consumergoods front, there is no chance that real
income in Russia, where food is by far
the most important item in the family
budget, will go up much unless Soviet
farms produce far more than they do
now. Agriculture fell short of the last
Five-Year Plan goals, hardly kept pace
with the postwar rise in population.
That's why Stalin has put new stress
on jacking up Soviet agriculture. Lack
of balance between industrial and agricultural output has become the greatest single threat to further industrial
expansion.

The chief reasons for Russia's food

deficit are:

 Heavy losses of agricultural capital suffered during collectivization.

 Continuous drain on the agricultural population to supply workers for industrial development.

 Failure to invest enough capital in agriculture to make up for a smaller work force on the farms.

Soil depletion, which largely accounts for the fact that Soviet grain

yields per acre in 1949 and 1950 were 6% under the average of 1925-1928.

• Industry Gets Priority—As a result of all these things, agricultural production since 1928 has lagged behind population during certain periods. For example, between 1928 and 1937 farm output went up only 15%, whereas population rose 20%. During the years 1937-1940 farm output per capita was 10% under the level of 1928. It was not until 1948 that it reached the precollectivization level again.

Stalin has been well aware of the farm problem ever since the war. But he has insisted on giving heavy industry first priority in the Soviet economy. Now he apparently hopes to solve the problem largely by large irrigation and reclamation projects. But they shouldn't be overrated. The Volga-Don project, for example, will increase the arable land in that particular region by only 6% to 7%.

Stalin plans another attack on the food problem, as well. Agriculture is to be administered in the future with the same kind of centralized controls that are now used for industry.

Proof of Industrial Achievement

What does Stalin have to show in the way of industrial strength after 25 years of consumer-starving industrialization? There's only one answer to that question: He has been far more successful than most Western experts ever believed possible (BW—Oct.18'52,p164). The rate of industrial advance in Russia has been amazingly fast in the postwar period, especially in the area behind the Urals. As a result, Stalin has created an industrial structure that may rival that of all Western Europe combined before many more years. If you add Eastern Europe's heavy industry to Russia's, the Communists may be able to reach that point soon after 1955.

 The Figures—This year's output of steel in Russia will be 38.6-million net tons, or more than twice the 1947 level. Electricity output will be 117billion kwh., well over twice 1947's. Coal will reach 330.6-million net tons, or almost double 1947.

Compared with Western Europe, Russia this year will produce 90% as much steel as Britain, France, and West Germany combined; 70% as much coal; and 70% as much electric

power.

By comparison with the U.S., Russia's industrial output is rather small. American steel capacity, for example, is almost three times that of Russia. For total industrial capacity the ratio is at least 4-to-1 in our favor. But these ratios can't be translated into

military output. Because Soviet consumption is held in a strait jacket even in peacetime, the Russian government can and does use a far higher percentage of, say, its steel and oil output for military purposes than the U.S. government can.

There should be no illusions in the West, either, about the level of Soviet technology, whether in aircraft or steel. Not that it matches U.S. standards in most fields. But it's not so far behind as many Americans would like to think.

Here's a quick rundown of five key Soviet industries, with some appraisal of their strengths and weaknesses:

Steel. The steel industry is court favorite in the Soviet Union. The bulk of the industry is concentrated in three huge centers—the Donbas, the Urals, and the Kuzbas (map, page 102).

What amounts to a fourth Soviet center, with a 1952 capacity of about 10-million tons, has been constructed now in the Polish-Czech coal region.

When Stalin took charge in Russia, investment in steel was concentrated in the biggest and the technically most advanced plants. All new construction followed the most advanced design the Russians could obtain. Some of them were big even by American standards. For example, the plants of the Magnitogorsk Steelworks, which were built in the late 30s, had a capacity of 4.5-million tons of pig iron, 5-million tons of steel, and 4-million tons of rolled steel products. During this

period, the Soviet Union went in for large-sized blast furnaces even more extensively than the U.S.

The greatest natural obstacle to Soviet steel expansion is the geographical separation of iron ore and coking coal. Coking coal, for instance, is transported by rail from the Kuzbas to Magnitogorsk in the Urals, a distance of 1.250 mi.

Petroleum. The Soviet oil industry has been nursed along by the government almost as carefully as steel. There is no doubt it needed special attention right after the war, for crude oil output was sagging badly in 1945, largely because of the heavy wartime destruction in the Caucasus. It was down to the level of 1935-about 25million tons. Today it's well on the way to reaching 60-million tons, or the goal Stalin once set for 1960. This is largely due to development of the "Second Baku," the oil region just west of the Urals, along the reaches of the Volga and the Emba. The exploitation of these new reserves was greatly speeded by the lend-lease equipment sent to Russia during the war.

Even so, refining capacity is still so limited that increasing consumption by the Soviet air force has forced a widespread conversion to diesel engines for

tractors, trucks, and tanks.

Aluminum. This is another industry that has been singled out for top-speed expansion. It's a latecomer in Russia, for even in 1930 all the aluminum consumed in the country had to be imported.

By 1940 aluminum production had reached about 55,000 tons, or enough to build 20,000 airplanes a year. (Half of the aluminum that went to build 40,000 planes a year during the latter part of the war came from the U.S. and Canada.) Today annual capacity is probably about 200,000 tons.

The postwar expansion in this industry can be attributed partly to the seizure of plants in Eastern Europe. Much of the equipment for Russia's largest aluminum plant in Krasnoturinsk (Urals) came from a dismantled plant near Berlin. Huge aluminum plants have been built since the war in Semipalatinsk, Leninogorsk, and Alma Ata.

Electricity. Russia lost heavily in electric power during the war, when cutput fell far below the prewar level of about 40-billion kwh. But by 1950 production had been boosted to 80-billion kwh. and has since risen considerably to take care of the aluminum industry and Russia's atomic development. The current Five-Year Plan calls for trebling hydroelectric capacity.

Coal. In terms of postwar expansion, the Russian coal industry doesn't quite stack up with steel, oil, or electric power. Still, the progress made in opening new mines, especially east of the Urals, has been almost equal to that made in the other basic industries.

However, coal may some day prove to be a real problem in Russia's heavy industry sector. The country's coal reserves are relatively limited, and are mostly located in northern regions where climate is a serious handicap even in the Soviet system.

Siberian Growth

The big gains in coal and steel, as well as other industries like aluminum, have been achieved by an expansion of output in Siberia-the vast area that stretches from the Urals to the Pacific Ocean. The bulk of industrial investment since 1945 has been devoted to this region, which contains an estimated 80% to 90% in Russia's reserves of coal, iron ore, and nonferrous metals. Of the 45 blast furnaces built in Russia between 1945 and 1950, about 30 were located in Siberia. This area also got 90 electric furnaces. During the same years 55-million tons of coal a year were added to Soviet output by the opening of new coal mines in the Kuzbas, the Urals, and Kara-

Today over 50% of Russia's output of coal, iron ore, and steel comes from Siberia. In addition, Siberia now provides from 75% to 80% of Russia's requirements of copper, nickel, tin, cadmium, molybdenum. A big, though unknown, part of Russia's war industry

is located there.

• Slave Labor—Much of this development has been based on slave labor. The bulk of Russia's 20-million slave laborers have been assigned to this region under the wing of the MVD, Russia's secret police. It is estimated that the MVD has been in charge of at least 30% of the industrial investment that has been made in Siberia since the war.

The postwar industrial expansion in Siberia has put Communist Russia in a position for the first time in its history to wage a two-front war-in Europe and Asia. Moreover, Siberian industry is being geared to supply hot only the Soviet Far Eastern forces but the armies of Communist China.

• Total Planning—Economic planning has necessarily played a decisive role in the industrial development that Stalin has engineered over the last 25 years. Since the state possesses a complete economic monopoly, it couldn't be otherwise.

But that's not to say that the Russians have mastered the art of total economic planning (BW-Nov.1'52, p116). They have planned the growth

of heavy industry with considerable success, but the history of the last 25 years shows how far Soviet planners have failed to produce a balanced econ-

Some strange cracks have shown up in Soviet economic planning. Take the Central Planning Commission, which was set up to supervise the five-year plans. In 1940 the Commission had its authority severely cut, as a result of two tonside decisions:

result of two topside decisions:
(1) The production of consumer goods was taken from under its wing.
(2) Because it was so critical, construction of hydroelectric plants was

turned over to MVD.

Today the MVD controls the construction and administration of atomic energy as well as hydro plants. One reason for giving the MVD such a decisive position in the Soviet economy is the fact that MVD controls all the slave labor in the country. Probably a more important reason is that it has complete priority over all raw materials and machinery.

• Seams Split—It's the Soviet political system, however, that puts the severest strains on the planning setup. That's because any blunder in the allocation of material or its transport—and apparently there are many in Russia—immediately gets reflected all along the line. For example, a plant is assigned a production quota, which must be met on pain of punishment. If a supplier fouls things up, it's almost inevitable that the plant manager will used the deception and concealment in his relations with the central authorities.

The Soviet system of premiums for plant managers tends also to stimulate deception and corruption. The income of a plant manager depends nearly as much on premiums for meeting or surpassing targets as on his regular salary. Thus the Soviet plant manager has a stick at his back and a carrot in front of him. So he is constantly tempted to deceive the bureaucracy who assign him his targets and check on his record.

REPRINTS AVAILABLE Single sepies of this Report to Executives will be available in about three works to husaness WEEK infactibers upon request without clarge. Other copies will be billed at the following rates: 1 to 10 copies, 20d each; 11-100 copies, 164; 101-1,000 copies, 174; ever 1,000, 704. Address orders for reprints to Reader Service Plept, Business Week, 330 West 82nd Street, New York 36.

Whither Russia?

What is ahead for the consumptionstarved society that communism has fastened on Russia? And what can the outside world expect from its powerhungry rulers?

You can get some light on these questions from the line Stalin laid down for the Communist congress. The evidence, such as it is, seems to add up

this way:

• The Soviet is still too weak to risk an all-out war with the West. But constant pressure around the Communist bloe's borders will continue. Here the Communist rulers come into contact with Western influence and they regard that, just as they regard opposition at home, as a menace to their authority.

• The tensions in the Soviet Union are real. Not only has Stalin's harsh rule produced despair and hatred, but constant harping on the danger of a capitalist attack has produced fear. As a result, Stalin tried on the occasion of the congress to relieve some of the tension by (1) promising the people more consumer goods; and (2) telling them that Russia is now so strong that war with the West is no longer inevitable.

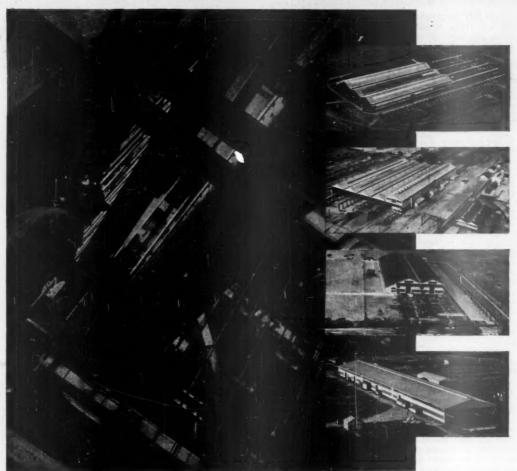
• The Russian people will be driven as hard as ever. That's the price they will pay for any small increase in living standards and for Stalin's success in "saving the peace." For Stalin aims to push Russian industrial strength to a point where his chances of victory in a world war are greater than now. He counts on division in the West, especially growing economic rivalries, to prevent the addition of equal strength to

Western power.

• The rate of industrial expansion in Russia probably has reached, or passed, its peak. As distances between raw material resources and production centers increase and as raw materials of lower quality have to be exploited, there's bound to be some slowdown in the rate of expansion, especially when no compensation can any longer be found in the exploitation of Russian manpower. These things won't block the further growth of Russia's industrial strength, but probably Picy will have definite limits on it long before it approaches the U.S. level.

Before that happens, though, the totalitarian Soviet state may drive itself inexorably to world war. Or, if that doesn't happen, it may, in time, disintegrate under the weight of its own shortcomings. Stalin once said: "Production divorced from the satisfaction of the needs of society withers and dies." Stalin's failure to live by his own dictum may some day catch up with the

rulers of Communist Russia.



SPEEDING STEAM POWER ON FOUR NEW FRONTS



America's industrial growth is measured in kilowatts, units of electrical energy which make up the brawn and sinew of U. S. production. More and more of these energy units are being consumed in this land which is, characteristically, always building, always pioneering. In fact, so many lusty, bawling industrial infants—children of America's men of vision—are growing up so fast that Babcock & Wilcox is pouring millions of dollars into new plants and equipment to provide more steam power for public utilities and for all industry. New plants at Wilmington, N. C., West Point, Miss., Brunswick, Ga., and Paris, Texas, recently have been added to B&W's network of facilities for manufacturing the equipment to harness energy through the driving force of steam. In all, ten great B&W plants, spotted around the map like sentinels helping to guard the nation's strength, are efficiently geared to continue to contribute to America's boundless potential.

INTERNATIONAL OUTLOOK

BUSINESS WEEK DECEMBER 20, 1952



If Western Europe has its way, there'll be a drastic revision in the defense plans of the North Atlantic Treaty Organization.

Here's the view that European leaders have pressed on the U. S. at the current NATO meeting in Paris:

• There is far less danger of Soviet aggression in Europe than NATO estimated at Lisbon last February. So defense goals can be cut. The right policy: Don't push quantity production of current types of aircraft and other arms; instead, concentrate on advanced weapons for 1955.

• The real danger lies in Asia and—to a lesser extent—in the Middle East. More of NATO's strength should be diverted to Indo-China and Malaya. The U.S. should play a bigger role in the defense of these spots and the Middle East.

This policy was master-minded by Winston Churchill during the summer. It's the view most Europeans take of the world situation. What's more, it opens the escape hatch from the kind of rearmament burdens that might produce an economic crackup.

At the NATO meeting, though, the U.S. strongly opposed the idea of a letdown in Europe's defense. Neither the Pentagon nor the State Dept. takes such an optimistic view of Soviet intentions in Europe.

It will be up to Eisenhower to have things out with European leaders, especially Churchill.

Before Eisenhower gets to this task, you may have a new government in France.

Right now the Gaullists are pushing the Pinay regime against the wall. Apparently, their aim is to upset the government, and create a new one with several Gaullists in top cabinet jobs. (The Gaullists say they would join a new coalition without insisting that De Gaulle be premier.)

If the Gaullists are successful, you can expect two things to happen:

- The Catholic MRP party, on which Pinay now leans heavily, would split apart.
 - · Socialists would line up more and more with the Communists.

A Gaullist-dominated government in France would give Washington plenty of headaches. Here are some of the things it might do:

- Try to veto German rearmament. The Gaullists have bitterly opposed Foreign Minister Schuman's German policy.
 - · Follow an even tougher policy in North Africa (page 110).
- Dicker with Stalin for a truce in the cold war, perhaps a deal in Indo-China.
- Force the Socialists into a united front with the Communists, thus giving Stalin a chance to reestablish his control over French labor.

There's a new hitch to German ratification of the European Defense Community and the contractual agreements with the West.

Because of a legal tangle, Chancellor Adenauer now has to wait until February or March before he can move. (West Germany's Constitutional Court has to rule on whether the treaties can be ratified by a simple majority of the Bundestag, or whether it takes a two-thirds majority.)

Meanwhile a lot of steam has gone out of Adenauer's drive to get West Germany tied in with NATO.

There's even semi-official talk in Bonn of scrapping both the contractual agreements and EDC.

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK DECEMBER 20, 1952 Top European economists are warning that if the U. S. cuts tariffs, the world's economic ills won't automatically be over.

These experts are afraid that many Europeans think U.S. tariff reductions would remedy their dollar problems. Economists agree that a downward revision would help a lot. But they insist that even deep cuts wouldn't span the dollar gap.

France, for example, couldn't hope to earn enough dollars with its exports to meet its needs—even if our tariffs were completely scrapped.

The basic problem, say the economists, is production: Europe must produce more, and produce it more efficiently.

The plan for a world economic conference lost ground at the European Economic Council meeting. Piecemeal discussions, it was decided, seem more promising.

Meanwhile, the British Commonwealth economic parley has wound up. It rejected a proposal for an Atlantic Payments Union, failed to agree on any commodity stabilization programs. Instead, it decided to proceed along familiar lines:

- Tighten domestic financial policies in countries running dollar deficits.
- · Ask the U.S. to liberalize its import policies.
- Promote larger, more regular U.S. private investment abroad.
- · Seek a loan to back currency convertibility.

U.S. businessmen in Brazil can look forward to a new deal for 1953. President Vargas is expected to O.K. a free-exchange market bill soon.

Under it, most foreign investors could move capital and dividends at will in and out of Brazil at a free rate. This is expected to hover around 35 cruzeiros to the dollar, compared with the current pegged rate of 18.72 cruzeiros.

This system would be a mixed blessing to investors already in Brazil. Since last January's dividend freeze, many U.S. companies have piled up big backlogs of earnings. Now they can exchange their cruzeiros for dollars, but each cruzeiro will buy less dollars.

Brazil's idea, of course, is to lure more and more dollars into investment.

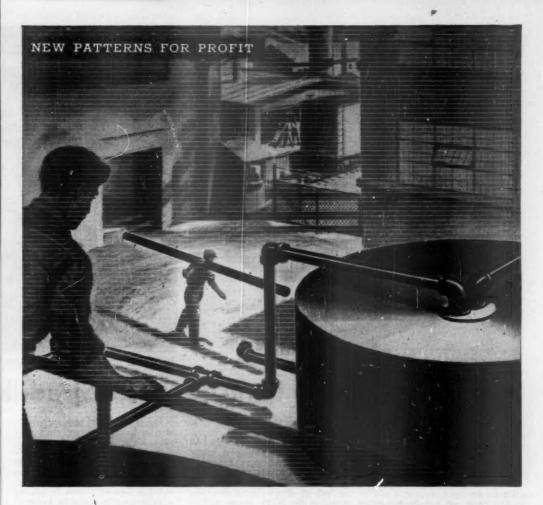
Any free-market arrangement wouldn't directly help U.S. exporters to whom the Brazilians are \$400-million in hock. This week there was hope the Export-Import Bank might arrange financing to clear up the debts.

Brazilian exporters would benefit, however. They'll be able to sell many overpriced Brazilian exports on the free market. And they could quote lower prices in foreign currencies—because their revenues would buy more cruzeiros.

Argentine financial circles are all agog. Miguel Miranda, economic czar until 1949, has returned from voluntary exile in Uruguay.

Rumor has it that Miranda, whom most observers blame for Peron's disastrous economic policies in the past, has come home to mastermind Argentina's highly touted new Five Year Plan. It was Miranda, remember, who hiked Argentina's export prices for foodstuffs way above world market levels with the words: "When they get hungry, they'll come to us."

Apparently, Miranda has tremendous influence on the stock market. When he left under a cloud in 1949, the bottom fell out. Last week it surged.



Can this "pipe dream" make money for you?

A remarkable new pipe has been developed that's virtually "corrosion proof" for nearly all uses. It's made of glass fibers combined with a polyester resin.

The new pipe is so light a twentyfoot length with a four-inch diameter can be lifted overhead with one hand. This pipe can be ordered to meet your own needs for bursting pressure and rigidity. When ordered for special service, it can be made with polyester resins that will withstand heat up to 500° F.

You can use it outside the plant for diesel oil, gasoline, butane, irrigation water or brine-no painting

is required. Use it inside the plant for fruit juices, beverages or for piping alum solutions and most acids and alkalis.

This chemically resistant pipe is only one application of glass fiberpolyester laminate made with Monsanto's styrene monomer. This material is also used for a host of other products ranging from building panels to huge storage tanks. To find out if this tough laminate can set a new pattern for profit with new products for your business, write to Monsanto Chemical Company, Department B, Texas Division, Texas City, Texas.

They use styrene derivatives-can you?

Electrical Appliances Shees and Luggage Wall and Floor Tile Rubber-Based Paints

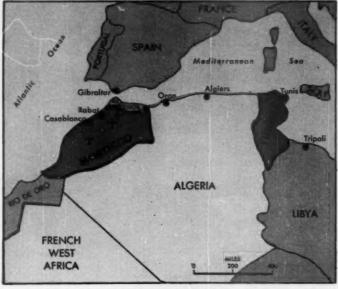
Construction Materials Fixtures Coatings for Paper and Textiles Automobile and Truck Bodies **Conveying Equipment** Oil Paints **Baking Enamols**

Capalymer Resins



SERVING INDUSTRY ... WHICH SERVES MANKIND

BUSINESS ABROAD





HOT CORNER in France's dwindling empire seethes with . . .

RIOTS as nationalists fight Frenc

th

BL

North Africa: How Long Can U.S. Straddle

The problem of French North Africa this week cast a pall over the Paris meeting of the North Atlantic Treaty Organization. In simplest terms, it raised the question of whether France can continue to exist as a major world power, willing and able to pull its weight in Western defense.

You could also feel the tension in New York. The recent violence in Morocco coincided with United Nations discussions on French policy in North Africa-first a debate on Tunisia, now one on Morocco. Asian and Arab leaders denounce the French. France is boycotting the debate as interference in its domestic affairs. The United States seems to be perched precariously on the fence.

• More Than Coincidence—Last week this country backed a weak-kneed resolution calling for Frenchmen and Arabs to talk out their differences with moderation. That's clearly impossible now. Ten days of bloody rioting in Morocco ended last weekend in an ominous calm. Over 100 persons were killed when nationalists there called a general strike, supposedly in protest over the assassination of a nationalist leader. But a lot of observers insist the demonstration was staged deliberately to coincide with the

opening of the United Nations debate on North Africa.

The French have cracked down hard. They rounded up nationalist leaders, deported them to France or to southern Morocco. Twenty alleged Communists were thrown out of the protectorate.

• Pearl of Power—That's about the status of the North African problem this week. It's become one of the testiest situations of the cold war. French North Africa dominates the southern approaches to Gibraltar; it forms nearly half the southern Mediterranean coastline, securing the West's link to Italy, Greece, Turkey, and Suez. Morocco itself is the major base of Western strategic air power outside Britain.

To France, North Africa—especially Morocco—is the pearl of a rapidly dwindling empire. Frenchmen of many political persuasions have warned Washington that they would pull out of Indo-China, or even out of NATO, rather than lose their hold on North Africa.

The U.S.-unhappily-is in the middle. We dare not jeopardize French participation in European defense. But we can't afford to alienate the entire Arab world. This is the sort of problem communism is betting the free world can't solve. There were a lot of pessimistic U.S. officials last week who wondered if that wasn't a good bet. To them the only questions seemed to be how long could France hold on? How much would it have to weaken its military establishments in Indo-China and at home to do it? How much U.S. help would it need?

I. Family Squabble?

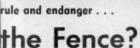
The three territories of French North Africa stretch roughly 1,000 mi. across the top of Africa, from the Libyan desert to the Atlantic.

Algeria, most of which has been incorporated into metropolitan France as departments (states), and the two protectorates, Morocco and Tunisia, are France's best foreign market and most important supplier. France imports about as much from its African territories—North Africa plus French Equatorial Africa—as it does from the entire Western Hemisphere, some \$800-million yearly worth of foodstuffs, raw materials, essential metals.

In Algeria, where some 8-million persons elect representatives to the Na-







tional Assembly in Paris and can emigrate freely as French citizens, nationalist spirit is quiet, but watchful. Tunisia has been seething, but the French have the situation pretty well capped (BW-Feb.2'52,p128). At the present time, it's Morocco that's

· Paper Sovereignty-The French are committed to respecting Moroccan sovereignty under the 1912 Treaty of Fez, which set up the protectorate. In practice, however, the Sultan enjoys paper sovereignty, while a French Resident General actually runs the country. France has been making vague promises and proposing reforms to lead Moroccans to full independen... But Paris has never set any timetable.
Part of France's troubles in North

Africa, most impartial onlookers agree, is the inconsistency of French policy there. It has wandered from stern repression to sweet reasonableness, depending on the internal French political

• Restless-In Morocco, France has insisted on full political rights for the 400,000 or so French settlers (out of a total population of 8.4-million). This group, whose land holdings average 370 acres per capita against 10 acres for



U. S. AIRFIELDS, which are strategic to Western security

natives, is the strongest, most conservative element in French Africa policy.

France's economic stake in Morocco has shot up since the war. Several hundred billion francs have been lured to Morocco by low taxes and the fear of World War III. There's a roaring boom in nonferrous metals mining, building, textiles, canning, leather, electric and service industries. But while the boom has generated skyscrapers and public works progress, it has also created a restless, ill-fed and ill-housed urban proletariat.

Nonetheless, Frenchmen insist-with good reason-that Moroccan living standards are higher than those in most independent Arab countries.. They recall that the country was rent by tribal wars when France took over 40 years ago. They point out that France must stay on until Moroccans are ready for self-government, that Moroccan independence now might result in a feeble, half-feudal regime wide open to com-

· Have To Be Shown-Moroccan nationalists, through the loosely organized federation called Istiqlal (Freedom), scoff at French promises of eventual home rule. They're convinced that the long range objective of French policy is to annex the protectorate on the Algerian pattern.

Nationalists pooh-pooh French talk of economic and social improvement under the protectorate. They say all the gravy has gone to the French colonist, little to the native. They point to "Bidonville," a Casablanca suburb where some 200,000 Arabs crouch in huts made of tin cans. They look to the U.S. as the natural champion of suppressed peoples everywhere.

II. Outsiders

The U.S. is the third, and most unwilling, partner in the North African situation. Washington has been backing and filling in U.S. policy there since the war. President Roosevelt bypassed the French Residency during his Casablanca visit in 1943, had a private talk with the Sultan that fanned the latter's hopes for independence. Washington still recognizes the Sultan as the ruler of Morocco under the old Treaty of Algeciras, recently reaffirmed by the World Court.

On the other hand, the U.S. negotiated its air base agreements with the French, didn't even inform the Sultan. All official dealings with the protectorate are exclusively with the French.

• Vacillating-American policy has see-sawed wildy in the U.N. Last spring the U.S. backed the French in keeping an Arab-Asian plea for discussion of Tunisia off the Security Council agenda. This fall it backed an Arab-Asian move to put it on the agenda of the General Assembly. Now America has swung behind the French in supporting the toothless compromise resolution.

There's good reason for the wavering, to be sure. Traditionally and emotionally, Americans are on the side of subject peoples. But now that the U.S. has strategic commitments around the world, Asian, African, Latin American, and Moslem nations watch, hawk-eyed, for any sign of our veering toward imperialist policies by siding with the European colonial powers.

• Fanning the Fire—The U.S. dilemma

• Fanning the Fire—The U. S. dilemma shows up more clearly in Morocco than anywhere else. France is the keystone of Western defense in Europe. Some U. S. officials in Paris believe our failure to back France 100% in North Africa is doing more than any other thing to strengthen French resistance to German participation in a European army.

Strategic imperatives hobble us in Morocco proper, too. Stability there is essential to our \$500-million-plus investment in air bases. Washington is convinced that only the French can keep order; a switch to native rule might bring anarchy.

• All the Earmarks—That's just what Moroccan Communists want. Communism is strong there because the French have never dared to permit local labor unions, such as those that have emerged in Tunisia. That left the job of organizing up to France's own Communist-dominated CGT. French Communists now hold key jobs in Morocco unions. The Istiqlal movement itself has tried to fight clear of the Reds, but events have forced the two groups into a hazy alliance. And Morocco's recent outbreaks showed all the earmarks of Communist street-fighting drill.

III. What's Ahead?

Last week's Moroccan bloodshed has convinced the French that they should get tough in North Africa, regardless of outside opinion. Political concessions to nationalists are out. The U.S. will probably be forced by short-term strategic commitments to swing more solidly behind the French.

The French army can certainly hold the fort in Morocco and Tunisia, particularly with tacit U.S. support. But Paris will have to weaken its defenses at home and in Indo-China to do it. And the U.S. is sure to become more painfully involved.

For that reason, a number of U.S. officials favor sticking to a difficult neutral position, or even a pro-nationalist line. They admit it would cause confusion and instability, endanger French cooperation in Europe and Indo-China for a time. But they believe supportat least not hatred-from the nationalists would give the U.S. a better chance of keeping its air bases intact.





PARTNERS Pepsi-Cola and Schweppes mixers are teamed in a franchise swap engineered by Pepsi vice-president W. B. Forsythe (right).

A New British Cousin for Pepsi

The fizz-water and soda-pop fraternity has just come up with its biggest international deal yet: a transatlantic franchise swap between Pepsi-Cola Co. and Schweppes, Ltd., British producer of soda water, tonic, and mixers. Each will bottle the other's products in its home markets. Later, the partnership is likely to branch out around the world. • Benefits—The agreement seems to be a natural for all concerned:

 Pepsi gets a new line of quality products—noncompetitive with cola drinks—for its U.S. and other Western Hemisphere bottlers. Pepsi's expanding overseas operation gets a sales push in the United Kingdom through Schweppes' distribution network there.

 In return, Schweppes expects to see expanding North American sales of its concentrates, gets a growing (1-million-cases-yearly) Pepsi operation in Britain.

 The British Treasury, which has blessed the union, is counting on increased dollar earnings from the deal.

• The man who likes his gin-andtonic with the original Schweppes Quinine Water is promised about a 100% saving on each bottle (the imported Schweppes now costs anywhere from 33¢ to 39¢ for 10 oz.), along with cheaper Schweppes ginger beer for his Moscow Mules, ginger ale and sparkling water for his highballs.

Under the new setup, Schweppes will buy a Pepsi bottling plant in London (one of the few company-owned, rather than franchised bottlers) for £300,000. The money will go to the Pepsi concentrate producing subsidiary in Britain, which will sell its concentrate to Schweppes for pounds. Later, the Pepsi subsidiary will be able to remit profits

in dollars to the U.S.-under Treasury limitations. Schweppes will have the entire U.K. as its market, but will respect the franchises of several smaller Pepsi bottlers that are already in business there.

Pepsi here will buy the line of Schweppes concentrates for dollars, send them to many of its 500 or so domestic bottlers. Canada and Mexico will get some, too. Pepsi is readying a big advertising campaign, timed to appear with the first U.S-bottled Schweppes product-tonic water-next spring. Pepsi hopes to bottle at least 1.5-million cases during the first year of operation.

Pepsi first vice-president William B. Forsythe says this "healthy, unsubsidized two-way trade" is in no way vulnerable to antitrust charges; this is essentially a cofranchising arrangement—not a patent swap or a market allocation deal.

· Hustling-For Pepsi's awesome rival, (Pepsi people always speak of competition in the singular), the deal might mean more competition in world markets. Coca-Cola's international empire is big, far bigger than Pepsi's. But Pepsi is busily expanding abroad, and the Pepsi-Schweppes deal includes the possibility of joint bottling enterprises around the world, perhaps in markets neither of the partners would have entered alone. Pepsi's Forsythe hints that the deal can have "far-reaching effects" in the world's soft drink business. One straw in the wind: expansion-minded Schweppes has already acquired a Pepsi bottler in Brisbane, Australia, will produce both companies' products there.

Pepsi, which is now climbing back to good health after some flat years (BW-

RUGGED, LOW COST AIR CYLINDER WITH BUILT-IN VALVE SETS NEW STANDARDS FOR FAST, PRECISION OPERATIONS



Any repetitive push, pull or lift movement now done manually can be performed infinitely faster, safer, and at lower cost with this unique, electrically-controlled Bellows Air Motor. The range of work it can do is limited only by the imagination of the tool designer or production engineer.

Unlike conventional air cylinders which require separate remote valves and cumbersome piping, The Bellows Air Motor is a complete power unit. It is compact, fits into crowded quarters, on moving machine elements. It is fast, responds to a starting impulse instantly. It is safe. Its low voltage operation simplifies wiring. It is sturdy, records of 10,000,000, 15,000,000, even 30,000,000 cycles without maintenance or repairs are commonplace.

The Bellows Air Motor is made in a wide range of mounting styles; in five bore sizes to meet varying power requirements; and in standard stroke lengths up to 48". For mechanical or manual operation the Air Motor can be equipped with a built-in manual valve, or for operation in

explosive-hazardous areas with the built-in explosion-proof electrically controlled valve.

The Bellows Air Motor gives you an entirely new conception of the productive possibilities of air power. In the thousands of manufacturing plants where it is in use, it is establishing daily new records for cost reduction and improved productive efficiency. In metal working, in plastics, in woodworking, in any industry you can name, these versatile power units are sparking the imagination of cost conscious production men looking for ways to do old and new jobs better.

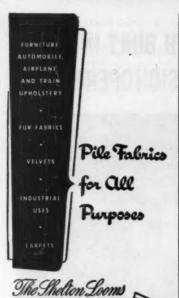
WRITE FOR THIS FREE 32-PAGE BOOKLET

HERE IN THESE QUICK-READING PAGES IS THE STORY OF "CONTROLLED-AIR-POWER"— WHAT IT IS DOING FOR OTHERS— WHAT IT CAN DO FOR YOU. THERE IS NO COST, NO OBLIGATION. ADDRESS: DEPT. BW-1252, THE BELLOWS CO., BELLOWS BLDG., AKRON 9, OHIO. ASK FOR BULLETIN CL-30.



The Bellows co. akron 9, ohio

BELLOWS "CONTROLLED-AIR-POWER" DEVICES FOR FASTER, SAFER, BETTER PRODUCTION





ONE PARK AVE. . NEW YORK 16.



HYGRODIAL verifies humidity

HYGRODIAL is one of the world's finest weather instruments. It tells you the exact amount of moisture in the air ... at a glance. For homes, offices, factories. \$15.

Write for information.

FRIEZ INSTRUMENT minion of
1416 TAYLOR AVENUE
BALTIMORE 4, MARYLAND
EXPORT SALES: Bandix informational Division
72 PPM Avenue, New York 11, N. Y.

Jul.5'52,p55), has an expanding base of overseas operations to build on. This year, 19 new Pepsi bottlers abroad opened for business, bringing the total string to 196 outside the U.S. (101 of these are in Canada). Also, there are Pepsi-owned concentrate plants in France, Australia, Brazil, Mexico, South Africa, Britain, and Canada. Next year, Pepsi hopes to start up 29 new bottlers abroad, in such places as Bangkok, in Thailand, the Belgian Congo, and Khartoum, in the Sudan.

You can't pry figures for overseas sales out of Pepsi executives; they don't want to let "the competitor" know. But it is significant, in view of Coca-Cola's big overseas business, that Pepsi people insist that in those areas where they have begun bottling, Pepsi consistently equals and often outsells all competition. What's more, Pepsi claims it has the statistics to prove it.

• Pepsi Progress—Prewar, Pepsi business abroad was tiny, consisted of some small bottling businesses in the Caribbean area. During the war, Pepsi began pushing south into Latin America. As soon as V-J Day came, Pepsi emissaries headed off in every direction. One of the first big operations was in the Philippines; later South Africa, the Middle East, and Europe blossomed with bottlers.

Pepsi people are especially effervescent about their Canadian market. Canada, reports Forsythe, has been the scene of "spectacular progress" in the last year or so; it's one of the great soft drink consuming nations in the world. Pepsi claims that last year, when total Canadian soft drink sales were reported off 10%, Pepsi sales climbed 18%.

Perhaps the most interesting market in the world for soft drinks, says Forsythe, is Japan. Right now Pepsi is limited to bottling for the U.S. armed forces there. But it's working hard to establish a going civilian operation. When it comes, says Forsythe, Japanese consumption should exceed any other single market in the world.

The Pictures—Cover by George Giusti. Fabian Bachrach—114; Ed Burks—140, 142; Bill Clinkscales—52, 58; Harry Compton—32; Consolidated Vultee Aircraft Corp.—60; European—44, 98 (bot.); Fred's Photo Lab—121; Charles Frieschman, Black Star—111; Harris & Ewing—70 (top rt., bot. rt.); Int. News—70 (top lt.); Bob Isear—30, 31, 112 (lt.); Robert Phillips—118; Sovfoto—95, 98 (top); Standard Oil Co. (N. J.)—28 (rt.); United Press—110 (rt.); Wide World—70 (bot. lt.); George Woodruff—130.

BUSINESS ABROAD BRIEFS

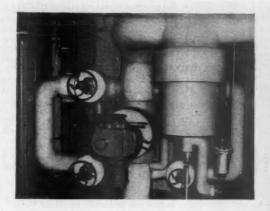


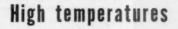
Warren Lee Pierson, board chairman of Trans World Airlines, is the new chairman of the U. S. Council of the International Chamber of Commerce. A businessman-diplomat for 20 years, Pierson recently wound up his work as U. S. representative on the German debts commission. He came to Washington in 1933 to work for RFC, became counsel and later president of the Export-Import Bank. Before joining TWA, Pierson was president of American Cable & Radio Corp.

Mexican memo: The Mexican Hotel Assn. says that tourists left \$300-million behind in 1952-far and away Mexico's biggest dollar source. . . Some 2-million houses must be built in the next eight years to keep up with population growth. . . Just finished: a \$5-million modernization job on the Pan American RR. . . . Just started: a \$13-million face-lifting for the Southern Pacific RR of Mexico.

"Together We Are Strong" is the title of a booklet just issued by the U.S. State Department to point out the value of imports. It pictures the life of the Johnsons, a hypothetical U.S. family cut off from foreign products. It's a tough life: Jim Johnson loses his job in the steel mill due to a lack of materials; his children cry for candy; his wife has no cosmetics.

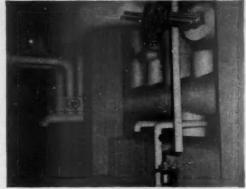
Guatemala last week started expropriation proceedings against a portion of United Fruit Co.'s vast Pacific Plantations. This action follows on the heels of demands by the Guatemalan Congress for revision of the operating contract of American & Foreign Power Co.'s subsidiary.

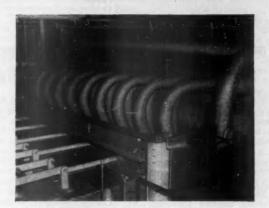




call for

the high efficiency
of K&M insulations





One of the most efficient combinations for insulating equipment with temperatures up to 1900° F. consists of K&M "Featherweight" 85% Magnesia and Hy-Temp Insulation.

Hy-Temp Insulation, which has exceptional heat-resisting qualities, is applied directly to the hot surface. When a sufficient thickness is used, the temperature of the insulation's outside surface can be brought to 600° F. or lower. "Featherweight" 85% Magnesia, which has a higher insulating value, is then applied directly over the Hy-Temp Insulation. Thus, the special qualities of both materials are effectively used.

Your K&M distributor, an experienced applicator, will gladly answer your questions about these products. Or, write to us for complete information.



KEASBEY & MATTISON

COMPANY . AMBLER . PENNSYLVANIA

in Canada: Atlas Ashestes Co., Ltd., Montreal, Toronto, Winnipeg, and Voncouver

LABOR

- Industry members of the wage board have dropped out, and labor members are no longer active.
- That leaves only the public members serving as a Wage Stabilization Committee.
- The old board isn't legally dead. But it won't be revived before Eisenhower takes
- In the meantime, a more or less mechanical WSC will be . . .

Carrying On for the Wage Board

The Wage Stabilization Board became the Wage Stabilization Committee this week. Its assignment is to serve as caretaker for wage controls until the Republicans decide what to do about them after Jan. 20:

The committee differs from the

board in two respects.

• The industry and labor representatives are gone, thus giving the country its first all-public administration of wage controls. This is something many business leaders have urged

for a long time.

• WSC will not issue any new wage policies, but will concentrate on cleaning out a backlog of 12,000 applications for approval of wage increases, about 3,000 of them in Washington. Special efforts will be made to decide most of them on the basis of existing regulations before the year ends-so as not to complicate tax problems.

 Makeup—Members of the committee are WSB's former public members: chairman Charles C. Killingsworth (BW-Dec.13'52,p48), on leave from Michigan State College; Harold L. Enarson, former Stanford University professor and recently aid to John R. Steelman, assistant to President Truman; Herman Lazarus, Washing-ton attorney formerly with the National Labor Relations Board and counsel to the Senate Labor Committee; and Meyer S. Ryder, former attorney for the National Labor Relations Board and the International Assn. of Machinists (AFL), and recently chairman of the Detroit regional WSB.

These public representatives are all that's left of the old wage board. The seven industry members, along with chairman Archibald Cox, walked out two weeks ago. They were protesting President Truman's approval of a \$1.90 daily wage increase for soft coal miners -40¢ more than WSB had recommended (BW-Dec. 13'52,p27). The labor members, having no counterpart

left on the board, could not participate in its activities any longer.

While there are no industry representatives at the national level of WSC, the old industry office of WSB will continue to function with a small staff under Herbert M. Kelley. The labor office will also remain open, with the AFL and CIO members of the old board standing by for consultation and "advice on an informal basis."

In six cities where WSB industry members did not follow their national leaders in resigning, the committee's offices will continue as a tripartite structure. These are New York, Philadelphia, Atlanta, Richmond, Kansas

City, and Denver.

· Revival?-Truman still hopes to woo industry members into serving again. The old board is not buried, legally. Before his resignation, former Economic Stabilizer Roger L. Putnam set the committee up only as an interim facility, with all the powers of WSB, to serve until the day WSB "is rendered operative by appointment of members representative of business and industry." Putnam's successor, Michael V. DiSalle, former price administrator, will continue WSC in that way.

There is no chance that this will happen in the month left before President-elect Eisenhower takes office. Whether it happens then will be up to the Republicans. Truman a week ago said he had many applicationsand good ones-to replace the WSB industry members who quit. But he found that many had changed their minds after both the U.S. Chamber of Commerce and the National Assn. of Manufacturers backed the industry walkout by urging businessmen not to serve on WSB.

· Productivity-WSC's decision not to recommend any new policies to stabilizer DiSalle puts on the shelf the long-awaited policy intended to allow "productivity" wage increases for all workers. Up to now, productivity increases have been approved only in the automobile and other industries where such increases were paid before stabilization. In individual cases, like that of General Electric, the increase has been approved on other grounds, such as gross inequity.

me

m ce

W

th

56

tr

Productivity wage increases now are being debated in the railroad industry. Railroad union contracts contain a cost-of-living escalator, but no annual productivity rise. The contracts state, however, that if government stabilization policies permit workers generally to get such increases, the matter will

be discussed further.

It has been discussed, and a referee-Paul Guthrie, former public member of WSB-is about to decide whether railroad workers are entitled to a productivity wage increase. He will probably rule in favor of the railroad brotherhoods. If he does, he will hold hearings later on how much of an increase they should get, and when.

• Fringe Benefits-One change in policy had been recommended by WSB before it broke up. Putnam was expected to approve it this week. It is an amendment to Reg. 13, covering fringe benefits such as paid holidays, vacations, and shift differentials. It would permit approval of major fringes on the basis of a tandem relationship with some other plant. Up to now, WSB has required a showing of industry or area practice before it would approve fringes. The amendment would also permit approval of minor fringes whose cost is de minimis (in law: a trifle), irrespective of other considerations. WSB already has applied this in the rubber industry, approving triple time for work on holidays at B. F. Goodrich. The CIO rubber workers have negotiated the same terms from U.S. Rubber and Firestone, and they anticipate no trouble getting these from Goodyear. The cost is supposed to average out to less than a penny an hour.

· Pro and Con-The new structure of

WSC should speed up the handling of cases. There will be less debate and wrangling now that industry and labor members are absent. Moreover, WSC plans to delegate to its staff more authority for making decisions.

The argument for tripartitism has generally been that it makes decisions more acceptable to the parties concerned. But it's hardly likely that WSC's rulings will be much less acceptable than some important ones made in the last year by the tripartite WSB.

Union Secession...

... in textile group hits a snag, as court rules that secessionists don't take their mill contracts with them.

What happens to a union contract if a local secedes from its parent international and affiliates with a rival?

Fortunately, few employers have to worry about that question. But it is a current problem in the textile industry—and a potential one in other situations where factionalism may lead to secessionist movements.

• Decision—Two weeks ago a North Carolina court gave an answer: It ruled that Marshall Field & Co.'s Fieldcrest Mills in Rockingham County must continue to deal with the Textile Workers' Union of America (CIO—although locals in the mills shifted last May from TWUA to rival United Textile Workers (AFL). The court held that the secessionists did not take mill contracts into UTW with them.

The decision said that the groups which shifted into UTW "have utterly failed to establish themselves as the identical locals who are parties to the contract."

• Fieldcrest Bolt—Three Fieldcrest locals voted last May to shift from TWUA to UTW. They demanded that Marshall Field recognize them as bargaining agents for its 3,000 Fieldcrest employees—since, they claimed, they had the same identity as the original TWUA locals. The company refused. It pointed out that TWUA said its contract was still in effect.

Under TWUA's constitution, no local can be dissolved "so long as seven members object to its dissolution." More than seven members refused to switch from TWUA in each of the three Fieldcrest mills—so TWUA locals continued to exist, to handle grievances, and the like.

Marshall Field argued, and the court agreed, that the firm cannot switch to bargaining with the AFL until TWUA's contract runs out, in May, 1953.



Cotton Towels* Help R. P. Scherer Corporation Maintain High Standards of Plant Sanitation

• Many billions of filled gelatin capsules have been made and shipped all over the world by R. P. Scherer Corporation of Detroit, Michigan since this company was founded in 1933. Scherer's high standards of quality, accuracy and purity are recognized by major users of vitamin, medicinal, veterinary, food, flavor and industrial capsules. The company produces more than 4,000,000,000 gelatin capsules annually.

It is only natural for Scherer management to provide the finest sanitation facilities for their hundreds of employees in their manufacturing departments, laboratories and offices. In keeping with this policy, all restrooms are equipped with plenty of clean cotton toxels. You can be sure their employees appreciate the greater comfort afforded by soft, absorbent cotton toxels.

Whatever your towel problem . . . whether you operate a factory, institution, office or store . . . you can be sure soft, gentle, absorbent cotton towels will . . .

- · promote better employee morale and customer goodwill
- · keep your washrooms cleaner and tidier
- · increase cleanliness and sanitation among your employees
- cut maintenance cost . . . reduce fire hazard

Local service is listed in your classified book under SERVILINEN, LINEN SUPPLY OF TOWEL SUPPLY.

For free booklet that tells how cotton towel service will save you money, increase sanitation, efficiency, write Fairfax, Dept. B, 65 Worth Street, New York 13.

Clean Cotton Towels...

Sure Sign of Good Management

Fairfax-Towels

A PRODUCT OF WEST POINT MANUFACTURING CO.
WELLINGTON SEARS CO., SELLING AGENTS, 65 WORTH STREET, NEW YORK 13





Martin Durkin faces plenty of difficulties with Congress, labor, and industry. He's . . .

Getting Ready to Be Labor's Advocate

Martin P. Durkin will be in a tough spot when he becomes Eisenhower's Secretary of Labor.

Because he is a union leader—the first in 20 years to head the Labor Dept.—organized labor will expect big things from him: unquestioning partisanship, and an expansion and strengthening of the department, as promised by the Republicans.

For the same reason, whatever he undertakes will be watched with suspicious closeness by some Republicans and Southern Democrats, and by many in industry. Disturbed in the past by the labor advocacy of the present Secretary of Labor, Maurice Tobin, they hoped for the appointment of a man with no tight ties to labor. They want less partisanship, not more.

So any effort to build up the Labor Dept. may face opposition. If it means more authority for Durkin, there will be the stiffest kind of resistance.

 Undercurrents—Currently, in spite of Sen. Robert A. Taft's initial criticism of Durkin's appointment as "incredible," little is being said against the next secretary. He has a record of fairness, of competence in administration, of viewpoints well to the right of those of many other labor leaders. So, the general attitude is, "Give Durkin a chance." But the potential opposition is there. A highly articulate industrial relations executive from one of the nation's most important manufacturing companies remarked in New York last week: "We are looking for the same leftwing attitudes in the Labor Dept. that we ex-

perienced under Tobin.

Faced with this attitude in industry and on Capitol Hill, Durkin's task is a stern one. And it will be complicated by developments last week. Tobin proposed, under the Walsh-Healey Public Contracts Act, a \$1 minimum wage (13¢ increase) in the cotton, silk, and synthetic industries. Textile management protested angrily.

• First Test—This is likely to be the first problem Durkin will face—and it will test the extent of his opposition. By law, the Secretary of Labor can set minimum rates for work done on government contracts exceeding \$10,000. This power was curbed in the last Congress, which made the secretary's decisions subject to court review. But that hasn't satisfied critics.

After the Republican victory in November, the critics quieted down. They hoped for an appointment that would guarantee no more Walsh-Healey problems. Now, with Durkin named, they think the guarantee is gone. There's talk of pressing for repeal of the Walsh-

Healey act, or at least amending it to take away much of the secretary's authority.

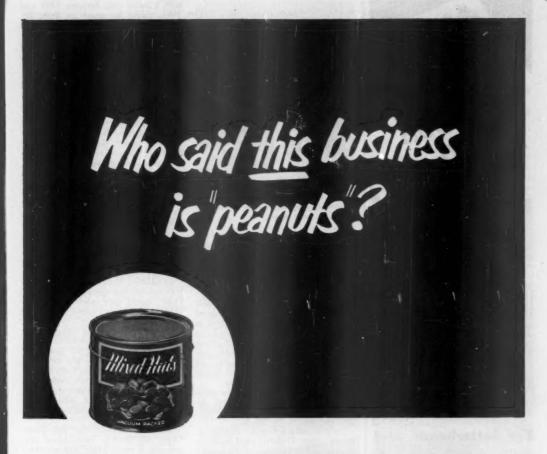
• Same Formula—By past record, Durkin is a man able to delegate authority—something he did well as State Director of Labor in Illinois—without losing touch with what goes on. He's expected to operate this way in his new job.

That will give him time to concentrate on major problems. One, of course, will involve new labor legislation. Another, the strengthening of the Labor Dept. And an important third, a far more intangible problem, the general improvement of relations both among unions and between labor and management.

 On Taft-Hartley—As president of AFL's plumbers union, Durkin consistently opposed Taft-Hartley. He supported AFL's demands for its repeal. He still believes that the law has inherent weaknesses.

Now, however, he has put aside labor's extreme view that the law must be repealed, replaced by a new one more favorable to unions. He now thinks the law can be amended to make it acceptable to both labor and management.

This is the same position being taken by both the new administration and Sen. Taft. Since Durkin doesn't intend



Another packaging achievement developed by Canco

Today, the nut business is as big as an elephant.

One of the things that helped it grow was the development of the vacuum-pack can.

Here's why. Packers wanted a container that would keep the crisp flavor-freshness of the nuts indefinitely; that would stand wear-and-tear of shipping and shelf, and would sell on sight.

"Can you make such a container?" the nut packers asked. "We can," Canco told them. And here's what Canco came up with:

A can with a vacuum seal which keeps out oxygen, the

enemy of freshness and the principal cause of rancidity.

In addition to this long-life protection, the can provided convenience and a fine surface for effective labelling; and instant self-service brand recognition.

You'll see cans like this in stores all over the country today, packaging peanuts, a great variety of other nuts, and cocktail assortments.

For 50 years now, Canco has been coming up with the answer to an endless variety of packaging problems, benefiting many businesses in many fields. And Canco will continue to pioneer improvements for its customers.

Go first to the people who are first

NEW YORK . CHICAGO . SAN FRANCISCO . HAMILTON, CANADA CANE





For letterheads and most other business stationery, specify Nekoosa Bond. It's better to work with and the best paper for you to work on.



MADE IN U.S.A.

MEKOOSA-EDWARDS PAPER CO. . PORT EDWARDS, WIL.



LABOR'S REACTION to the Durkin appointment, a Bernard Seaman cartoon syndicated to union papers.

to propose changes in Taft-Hartley himself, but merely to help Taft and labor leaders iron out their differences, he may avoid further trouble on early legislative problems. Unless, of course, his advocacy of the laborites' views should become too partisan.

 An Advocate—Durkin admits he will not be neutral, because the mandate of Congress that set up the Labor Dept. in 1913 did not intend the Secretary to be neutral. It charged the cabinet officer with the responsibility of fostering, promoting, and developing the welfare of wage-earners. To Durkin, this means that he must be labor's advocate.

But an advocate need not be partisan to the extent of overlooking the good of others. Durkin's record-indicates that he can do this.

He incurred union wrath in 1941, as Illinois State Director of Labor, by denying 20,000 members of the United Mine Workers unemployment compensation during a strike. Durkin ruled that any worker who strikes has no right to claim jobless pay. His ruling stuck, despite tremendous pressure for a reversal.

He holds that strikers have a right to picket, but that the right to picket "is no guarantee that any use of the picket line is justifiable." This, of course, is a view contrary to that of many union heads.

Durkin doesn't like the growing tendency of some labor groups to look to government to settle dispute settlements. He believes—along with the incoming administration—that settlements should be worked out by the parties concerned on "conditions in the local area."

These views will influence 1953 labor lawmaking. Others are sure to come out later. Despite Durkin's announcement that he will not suggest changes, he showed an active interest in state legislation in Illinois. He is credited

with a major role, between 1933 and 1941, during his tenure as State Director of Labor, in getting passed laws covering unemployment and disability compensation, work conditions, and minimum wages and maximum hours for women and children's work.

 A Stronger Department—Durkin's second major problem is to try to build up the Labor Dept., to bring into it more of the government activities that affect labor.

He would like to have the National Labor Relations Board, now an independent agency, put into the Labor Dept. for housekeeping purposes—for economy and efficiency of operation. He would like also to have the Federal Mediation & Conciliation Service restored to the department, and the National (Railway) Mediation Board added to the Labor Dept. on the same quasi-independent, administrative basis as NLRB. And he argues for shifting the Immigration Service to his department from the Dept. of Justice, pointing out that labor conditions are affected by

the labor coming into the country.
In addition, Durkin thinks the federal government, and specifically the Labor Dept., should have more to say about industrial health and safety, now largely a concern of the states.

All of these require congressional sanction. Durkin will seek enabling laws for the changes, but at the same time might find himself on the defensive. For example, Mrs. Oveta Culp Hobby, who will be Eisenhower's Federal Security Administrator, wants the unemployment compensation and employment service agencies shifted to her from the Labor Dept.

• Staff Relieved—Within the Labor Dept., the Durkin appointment was generally a relief. Many staff members who are confident of their competence now feel that they will be able to keep their jobs. Some technicians, however, are keeping their fingers crossed. They expected, with the Republican victory, to see an end to labor interference with their attempts to do professional jobs. In the past, they complain, AFL and CIO assistant secretaries interfered, at times, with what purported to be unbiased jobs. They wonder what will happen now.

• Unity—Durkin hopes to coalesce labor's forces through his office. He feels that labor should be unified, and that this is a strategic time to negotiate unity. Despite the protestations of sincerity of AFL and CIO leaderships in coming unity talks, Durkin's hopes may be dashed.

CIO's reservation about Durkin's appointment explains why: CIO is wary of his deeply grained belief in craft unionism. In unity negotiations involving industrial and craft unionism, it would want no mediation by a craft unionist.

T-H Injunction Challenge

Steelworkers call its national emergency anti-strike provisions unconstitutional, after Truman invokes the law in case affecting atom program.

President Truman last week invoked the national emergency provisions of the Taft-Hartley law for the tenth time—and probably his last. His action set the stage for a probable major constitutional test of this section of the law.

Sen. Robert A. Taft has said he will not support changes in the T-H national emergency procedure when amendments to the labor law come up. Hence the pending court challenge of the anti-strike provision is doubly important—for its effects on the law itself, and for its influence on labor lawmaking plans in 1953.

• Steelworkers—Truman's latest use of T-H was in a case involving American Locomotive Co.'s Dunkirk (N. Y.) plant and the United Steelworkers of America (CIO). His move ended a three-month strike of 1,600 production, maintenance, and office workers.

tion, maintenance, and office workers. USW struck the Dunkirk plant last Aug. 29 after a long dispute over wages and a union-shop clause. The union insisted that ALCO, a fabricator, meet the terms of basic steel's settlement. The company refused.

The walkout halted production of nickel pipe for the atomic energy program. When the pinch began to be felt, Truman named a board of inquiry in the American Locomotive dispute. Last week the board reported that "a substantial part of atomic weapon production" has been affected by the walkout. And it warned that if the strike were allowed to continue, it would soon "imperil the national safety."

Truman, in the past consistently reluctant to invoke T-H, instructed the Justice Dept. to seek an 80-day injunction—the first sought against USW —to end the walkout. A Buffalo federal court issued the order. USW com-

plied, under protest.

• Reaction—Since the enactment of T-H, unions have repeatedly criticized its anti-strike injunction provision. But the first nine times the provision was invoked by the Justice Dept., unions accepted it without a legal fight on its constitutionality.

For some time, Arthur Goldberg, general counsel for USW and CIO, has had doubts about the constitutionality of the 80-day injunction. He wasn't involved in CIO's two previous cases, injunctions against packinghouse and communications workers in 1948, so he couldn't challenge the law. But

now that USW is involved directly, and anxious to fight back, he is pressing a test case.

• Arguments-His challenge is on two

• The T-H emergency procedure violates the Constitution, he says, because it permits courts to deny a union the right to strike although there is no "legal controversy" or any violation of federal laws.

Invoking the emergency procedure in the Dunkirk case was unlawful because, USW says, the stoppage did not actually affect an entire industry, or a substantial portion of it.
 Constitution—The first of these

 Constitution—The first of these issues is the more important. It is the constitutional one. If the union should win on it, the whole emergency procedure in T-H would be upset.

Goldberg argues that in writing T-H, Congress did not specifically outlaw national emergency strikes; it merely sought to give federal courts the right to enjoin them at Justice Dept.'s request. This, Goldberg contends, is an illegal delegation of authority to the

USW takes the position that its strike against American Locomotive was legal in every respect; the union committed no unlawful acts such as mass picketing or violence, and there was no legal reason to bar a walkout.

USW Plans Great Lakes Spring Organizing Drive

When the spring thaw finally opens Great Lakes channels, ship operators can expect new union pressure to organize unlicensed members of their crews. A National Labor Relations Board runoff election between ClO's United Steelworkers and "no union" at Pittsburgh Steamship Co. will probably kick off the spring season (BW-Oct.11'52, 173)

The board will also hold representation polls early in the spring for crews of ships of Pioneer Steamship Co. and Buckeye Steamship Co. These are managed by Hutchinson & Co., which also operates Inland Steel Co.'s fleet.

• Basis—Last summer, when the steel strike forced ore boats to stay in ports, the steelworkers took full advantage of that chance to organize crew members who are usually out of reach of the

The drive barely got under way before the strike ended and ships left the docks. But USW did manage to get NLRB to stage a few elections.



Hatter Wears 2 Hats..

At Danbury, Conn., in the plant of Frank H. Lee Co., men's hatmakers, a group of employees now wear two hats on a day's job. Take Evio Scattoline (pictures), for example.

Scattoline is a hat finisher in the Lee plant. But when he has completed his hat work, he goes upstairs and starts working a turret lathe turning out parts on a Navy contract the company has.



.. As Plant Diversifies

About 60 other employees are also working from time to time on both hats and defense.

The company produces parts for aircraft engines, shell cases, and punches and dies to the tune of about \$250,000 a year in addition to its line of hats. Lee plans to add 60 more hatmakers to its defense operations soon. And another 100 people in the plant have both

PROSPERITY in the USA: Who Has It?

How prosperous are the people of the United States?

The previous editorial in this series answered this question for the average American. His prosperity has increased only slightly in recent years.

But the average tells only a part, and in many ways not the most important part of the story. Which individuals and groups have prospered more, which less? (The average, the result of a statistical calculation rather than a creation of flesh and blood, tells nothing about that.)

The purpose of this message is solely to get at the facts on this question of how prosperity is distributed. This is not easy. In spite of the crucial importance of the subject, the available information is limited. Even so it is possible to provide a rough answer to the question, "Who has the prosperity?"

We Have Had a Revolution

The distribution of income in the United States has changed so greatly in the past twenty years that Arthur F. Burns, Research Director of the National Bureau of Economic Research, world renowned for its impartiality and technical competence, calls it "one of the great social revolutions of history." A part of this revolution is portrayed by the following table which shows that individual incomes are both much larger and much more evenly

distributed than they were twenty years ago. Clearly, a large new middle-class has been created.

DISTRIBUTION OF REAL INCOME

Dollars of Income*	Per Cent of Families in Each Income Group	
	1929	1951
Under 1,000	17%	13%
1,000 - 2,000	24	15
2,000 - 3,000	24	18
3,000 - 4,000	14	18
4,000 - 5,000	6	15
5,000 - 7,500	9	14
7,500 and over	6	7
	100%	100%

*Adjusted for price changes to give the dollar its 1951 purchasing power.

Some light on why this income revolution has taken place can be found by tracing incomes to their source. Since 1929, for instance, employees have clearly made the biggest gains in total income. This can be seen in the next table. People who own their own businesses have done second best. Farmers, who are often thought to be doing handsomely indeed, have been outstripped in the income race by employees and businessmen. People whose incomes depend upon pensions, insurance policies, and other relatively fixed returns such as rent, interest and dividends have lagged far behind.

HOW REAL INCOME HAS CHANGED®

Types of Income	Percentage Change 1929 to 1951
Wages & salaries of employees.	+123%
Income of professional men & unincorporated business	+108
Farm operators' income	+56
Rental income	+1
Dividends	+2
Interest	-35

^{*}In this and the previous table account is taken of changes in the cost of living. But adjustment for the changing tax load was not possible, as it is in the computations which follow.

The Biggest Gains

Employees have made the biggest gains in income, but the term "employees" covers a wide assortment of people-from the presidents of the biggest corporations to factory sweepers. How have different groups of employees prospered? Some indication is provided by results of a survey of salaries in 41 corporations made by Arch Patton of McKinsey and Company and recently summarized in the Harvard Business Review. This survey showed that between 1939 and 1950, after adjustment both for higher living costs and for higher taxes, factory and office employees made modest gains in income while management personnel suffered losses ranging from 40% to 60%.

While factory and office workers generally have made greater income gains than others, their gains have varied greatly from industry to industry. During the past five years, for example, steel workers' take-home pay (adjusted for both taxes and price changes) has increased by 22%, that of textile workers 9%, employees of general merchandise stores 4%, and that of laundry workers not at all.

What About Organization?

How have organized workers fared compared to unorganized workers? There is no round-up of facts that makes possible a direct comparison between the two. Such evidence as there is shows it is indeed an open question whether union members have done any better than others. Steel workers, for instance, who are strongly unionized are among the highly paid manufacturing workers. Farm workers are generally not unionized, and they work

in one of the most competitive industries in America.

But farm workers have made income gains which far surpass those of steel workers. Real wages of farm workers increased 2½ times more than those in the steel industry between 1939 and 1952. This fact may prove nothing more than that, in a period of inflation and manpower shortage, the less skilled workers whose incomes are ordinarily low, make the biggest percentage gain in income. Further support for this conclusion is found in the construction industry where real wages of unskilled labor increased 37% between 1939 and 1952, while those of skilled labor increased only 4%.

Why Most Incomes Are Higher

Prosperity, who has it? We may conclude that workers have been getting much more of it lately than managers or property owners, that unskilled wage and salary earners have made the largest gains, and that income generally is much more evenly distributed.

Where has the money come from to raise low bracket incomes? It has come partly from an increase in the total national income, but partly also from cutting down the share received by people in the highest income brackets. While the top 5% received 33.5% of the income after taxes in 1929, their share of income has now been cut about in half. For every \$11 of increase in income to the lower 95% of income receivers, about \$7 has come from increased production, and about \$4 by taking that amount from the top 5%.

Top bracket incomes have now been cut so deeply that the possibilities of increasing the income of the rest of the people by "soaking the rich" have largely disappeared. Indeed, if all of the income after taxes of everyone earning over \$25,000 in 1951 was taken away and redistributed among the remaining Americans, each person would receive only about \$65.

The significance of this revolution in income distribution is clear. It is that there is only one way by which the great mass of us Americans can continue to increase our individual prosperity. This is by earning the increase through more and more efficient production. In plotting the economic course of the U.S.A. this fact is of decisive consequence.

McGraw-Hill Publishing Company, Inc.

FOR SALE

Two practically new

METAL SPINNING MACHINES

Fully automatic, variable speed, hydraulically operated, double headadaptable for any high production spinning.

FEATURES

Push-button operation, self-contained hydraulic and electrical systems, adjustable slides and strokes, auxiliary slide and hydraulic hold-down.

CAPACITY

22 (and 26) inch maximum diameter raw material. 14 (and 18) inch maximum stroke.

MOTOR

25 h.p. DC Westinghouse Mototrol. trans. rectifier, from 220 or 440 V, 3 phase, 60 cycle AC source with variable speed control 75 to 900 r.p.m.

AVAILABLE IMMEDIATELY

CALL

H. R. Letzter, TUxedo 9-8500 Webster-Chicago Corporation 5610 W. Bioomingdale Avenue Chicago 39, Illinois

SAFE ACCESSIBLE
LOW-COST
STORAGE

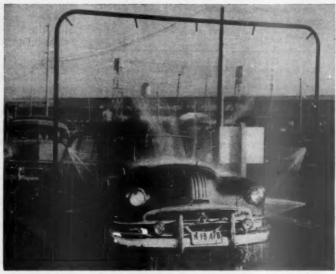
Today and every
day records must be saved
for your business protection
fomorrow. Over 90,000 leading firms find
LIBERTY STORAGE BOXES the best, most
efficient product for storing inactive
records. Check Liberty's sturdy corrugated
fibre-board construction, spill-proof,
dust-proof closures and low cost.
Sold by leading stationers everywhere.
CUP AD TO YOUR LETTERHEAD FOR COMPLETE CATALOG

hatmaking and machine operator's skills.

Schedules vary for these employees. As a Lee official put it, "they are in effect a pool of dual-purpose people." When hat production slacks off, they can be assigned to machines. In gen-

eral they are shuttled back and forth to whichever operation requires more manpower during any day or week. Employees are reportedly satisfied with the system, since it gives them more variety than they would normally get, plus extra pay for machine work.

LABOR BRIEFS



SPRAY BATH costs employees nothing, reaps good will for Weyerhaeuser Timber Co.

Free car washes are the latest addition to Weyerhaeuser Timber Co.'s laborrelations program at Longview, Wash. Employees simply drive through one of two sprayer systems installed in the company's parking lot.

An AFL victory over CIO's United Railroad Workers in a National Mediation Board bargaining election blocks, for another year, CIO efforts to win jurisdiction over 13,000 Pennsylvania RR shop employees.

A 30-hr. week is urged by Maine members of the United Textile Workers (AFL) to spread jobs in a declining textile industry. They want a federal law lowering the work week in textiles because "new streamlined production techniques have put thousands of skilled textile workers out of jobs."

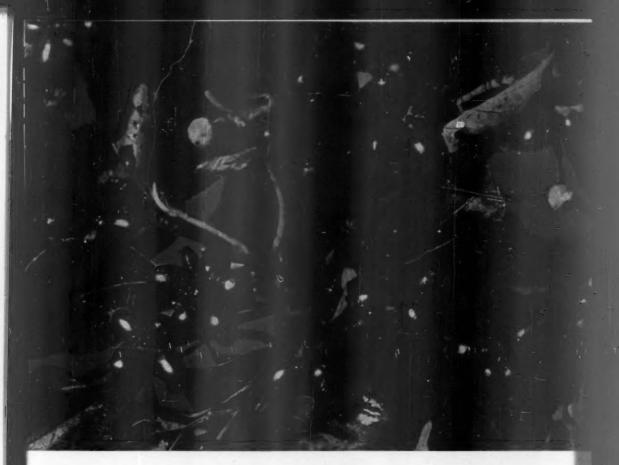
Injunction violations during the Farm Equipment Workers strike at International Harvester Co.'s Louisville plant resulted in court-ordered fines totaling \$7,000-\$5,000 for FEW, \$1,000 each for two local representatives of the

union. FEW is planning to appeal.

It's illegal to compel an employee to retire at an age under 65 in Massachusetts if he wants to keep on working, and can do so. The Massachusetts Commission Against Discrimination so ruled recently in a case filed under a state law (only one in the country) that bars job discrimination against persons 45 to 65 years old.

A bar on bias-in-employment because of race, national origin, color, or religion will be written into Canadian government contracts after Jan. 1, 1953, Minister of Labor Milton F. Gregg advised Canadian unions recently.

Settlement reached by Wilson Athletic Goods Mfg. Co. and Textile Workers Union of America (CIO) has ended an eight-month strike in Schenectady, N. Y. TWUA sought a 15¢ raise, will get an immediate 6¢ increase and 2¢ more next March. Workers will also get a lump-sum vacation payment for 1952, although they were on strike during the summer vacation period.



Winter Package

Just as the dogwood tree carefully packages its seed for protection against the elements, so does industry protect its products through the use of a wide range of packaging materials. Many of these materials, serving almost every type of packaging need, are advertised regularly in Business Week.

REASON: Business Week is read by a concentrated audience of Management-Men—executives who make or influence buying decisions for business and industry. Their firms are important buyers of packaging materials.

RESULT: More manufacturers of packaging materials regularly place more advertising pages in Business Week than in any other general-business or news magazine. These advertisers know...

YOU ADVERTISE IN BUSINESS WEEK WHEN YOU WANT TO INFLUENCE MANAGEMENT-MEN

BUSINESS WEEK

330 WEST 42ND STREET, NEW YORK 36, N.Y.



These Packaging Manufacturers Are Reaching Many of Their Major Markets Through Business Week

Acme Steel Co. Aluminum Co. of America American Can Co. Angier Corp. Central Paper Co., Inc. Container Corp. of America Continental Can Co., Inc. Crown Cork & Seal Co., Inc. Dearborn Chemical Co. The Dobeckmun Co. **Dutron Corp.** Empire Box Co. Fort Howard Paper Co. Fort Wayne Corrugated Gaylord Container Corp. General Box Co. Glas-Kraft, Inc Hinde & Dauch Paper Co.

Hudson Pulp & Paper Co. Kalamazoo Label Co. Kimberly-Clark Corp. Marathon Corp. The Mason Box Co. nesota Mining & Manufacturing Co. (Scotch Filament Tape) Mystik Adhesive Products Nichols Paper Products Co. Nox-Rust Chemical Corp. Paterson Parchment Paper Co. Rheem Manufacturing Co. Rhinelander Paper Co. The Ronor Corp. Shellmar Products Corp. Sharon Steel Corp. (Brainard Steel Co.) Albert Trostel Packings, Ltd. David Weber Co.

Source: Publishers Information Bureau Analysis

A McGRAW-HILL PUBLICATION



Humanity's challenge to chemical research-

Protection for ALL the nation's forests

One of the biggest single problems confronting our vast lumbering industry is a natural one: trees, like all plant life, are victims of insects. In fact, insects and disease annually destroy 30% more timber than is destroyed in forest fires!

To help lick this problem—and the bugs— Pennsalt researchers have developed effective insecticides for large-scale acrial spraying. In a recent outbreak of spruce budworm in the great Northwest, Pennsalt insecticides proved 99% effective, and brought the infestation under control at a cost of slightly more than one dollar an acre. The value of the saved timber was at least \$785 an acre.

There is every reason to believe that similar results can be obtained in forests throughout the entire continent. Such a program requires the concerted efforts of lumbermen and governmental agencies as well as chemical researchers. For its part, Pennsalt stands ready to offer its considerable experience in this fight to save one of our most valuable resources.

Since 1850, Pennsalt has been developing chemical answers to all kinds of problems. One of these answers may solve a problem of yours. Or perhaps Pennsalt's research team can work with you to tailor-make a special answer. Write to Pennsylvania Salt Manufacturing Company, 1000 Widener Building, Philadelphia 7, Pennsylvania.



PERSONAL BUSINESS

ECEMBER 20, 1952



USINESS WEEK Don't be surprised if your clergyman asks you, as a management man, for advice on some problems affecting every religious denomination today. Here are the three main difficulties—really three parts of a whole:

- · There aren't nearly enough churches and schools to take care of the growing suburban areas. Parent churches must create more offshoots to provide suburban dwellers with places of worship.
- · But new churches and schools are expensive. More funds must be raised to pay for them.
- · If new churches and schools get built, there'll be a still greater shortage of clergymen and teachers-unless salaries are raised. The Episcopal Church alone sees a shortage of 2,000 ministers in the next few years because of low pay (half the men in the New York diocese, for instance, get less than \$3,600 a year). Again, it's a problem of funds.

"More people now live in unchurched communities than at any time in the past." That was one of the findings at last week's general assembly of the National Council of the Churches of Christ in the U.S.A.

Estimates, which are not much more than guesses, are that U.S. communities probably need anywhere from 1,000 to 3,000 churches right now. And the fact that they do is because the nation has more people, and the people are moving around.

In the last 10 years, the population has shifted (1) away from rural areas, and (2) out of the urban areas into the suburbs. On top of this, there's been the dislocation caused by the arms program—the springing up of completely new communities around defense plants.

All this has meant that one-third of the Protestant churches in 23 metropolitan districts have either been standing still or losing membership. On the other hand, 72.2% of suburban churches have gained members.

The Roman Catholic Church faces much the same overcrowding of suburban pews. But it lists its No. 1 problem as schools, not churches. It figures that schools are dual purpose—that services can be held in the auditorium or some other makeshift spot until a church is added.

Rock-bottom cost of a church today is \$50,000; most run between \$175,000 and \$400,000, even though the trend is toward simple, contemporary designs.

There's no solid figure for the cost of meeting all church-building needs. But the Roman Catholics alone figure their school and church construction programs will top \$10-billion for the period 1945 to 1955. The Methodists estimate their costs at better than \$200-million.

Can churches foot the bill? The answer is no-not without heavy fundraising campaigns. And right now all denominations are driving for more money for building than ever before in history.

As a businessman you can expect: (1) frequent solicitations to get churches started; (2) continuing appeals even after construction is under way (many churches are being built piecemeal-one section at a timeas the money comes in).

Still lacking: an over-all plan for church construction. Despite prog-

PERSONAL BUSINESS (Continued)

BUSINESS WEEK DECEMBER 20, 1952 ress, there is need for greater coordination at a national level on what gets built where.

Consumer pressure for rewarding safe drivers with lower automobile insurance rates is having some effect.

Note last week's announcement by Liberty Mutual of a "progressive merit rating system" to apply to public liability and property damage insurance in California. A person who drives without an accident will get a yearly reward of a 1% reduction in his rates; if he has an accident, his rates will jump 5%. (For instance, a driver with no accidents in eight years would pay 8% less than the standard rate. But if he had had one accident, his rate would be only 3% less than normal.)

Meanwhile, Canada's Dominion Board of Insurance Underwriters, which includes companies writing about half the auto coverage in the Dominion, has announced a merit rating system effective with 1953 rates. Drivers with three accident-free years will be eligible for a 20% discount on premiums.

Widespread use of merit rating doesn't seem to be in the cards for the U.S. right now, however. A couple of companies are offering plans, but most are sitting tight. Their attitude: Rates will first have to catch up with experience—and losses on auto coverage must end—before discounts can be taken seriously.

Holiday liquor buying shouldn't cause any shopping problems this year. Supplies are good, with the only possible tightness being in extra-old Scotches. And prices—except for French champagne—are no higher than a year ago.

In selecting whiskies, age, of course, is supposed to be an important factor. Straight whiskies and a few Scotch and Canadian whiskies plainly show their ages on the front label. (Scotch and Canadian without an age marking are usually younger than labeled brands, and generally not so smooth.) On bonded bourbon or bonded rye whiskey, you can tell the age by reading the dates imprinted on the stamp at the neck of the bottle. If, for example, the two dates are "Fall, 1947" and "Fall, 1952," the age is the difference between the two, or five years.

On blends, you can find out how old the whiskies are (usually 25% to 35% of the mixture) from the back label.

Polio injections, using the gamma globulin blood component, will be given widely in epidemic areas next summer. These are the injections that were tested in Utah, Texas, and Iowa this year.

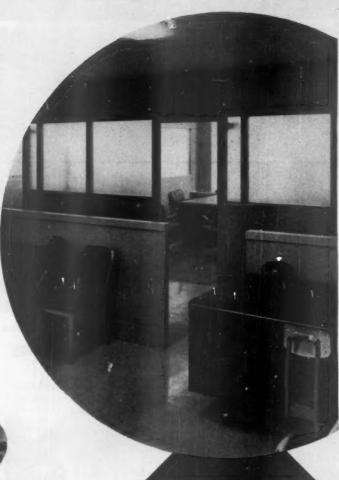
The program now calls for a tremendous setup in gamma globulin production. Indications are that as many as 2-million children in 150 areas will need protection.

It takes one pint of blood—an average donation—to supply enough plasma to make one ordinary dose of gamma globulin for polio.

To meet needs—and supply other requirements—that means donations will have to climb back to the area of their wartime peak, a rate of about 5-million a year. The American Red Cross, which will collect the blood, will stress this in local drives.

Will your plant or office layout fit your needs 10 years from now?





VMP MOBILWAL

... not a crystal ball ... Solve Present and Future Space Problems.

prepare for it by making your building interior flexible . . . adjustable to whatever the future may demand. Mobilize your factory or office space with MOBILWALLS ... the most complete line of movable steel

You can't predict the future, but you can partitions. Moreover, VMP provides the finest nation wide engineering and erection service. At your service now and in the future to give you maximum, most efficient use of your floor space to fit your changing needs.

Yours Free: New MOBILWALL catalog gives valuable information about adjustable interiors that solve present and future space problems. Write to Dept. BW12, Virginia Metal Products Corporation, 1112 First National Bank Building, Pittsburgh, Pa.

Pacemaker to progress in partition design and engineering



VIRGINIA METAL PRODUCTS CORPORATION

PLANT: ORANGE, VIRGINIA

also leading manufacturers of steel doors and frames, library stacks and equipment, and conveyors for vertical and horizontal transmission.



CHALLENGE: Rocky Boston slope looked impossible for building.





sit neg Ho "st hou hor dat hav fou sib on of gro the nes to get wit ven san air

as bui pla to of me Ro Mo roo fasl ven .] wil \$70 \$85 sto SVS his get hor ove loa

the the doe

and

cos

nec

in

am

the

.]

of :

BUS

ANSWER: With cantilever-type house of Mark Rosenfeld you can . . .



LEDGEHILL HOUSE is a unique prefab.

Build It on a Ledge

The days of the cliff dweller aren't over yet—at least in Boston. On the side of a ledge in the city's suburban Hyde Park area, this week a 300-home community is getting under way.

For years the steep and rocky 500acre tract in the Stony Brook Reservation has stood idle while residential expansion went on all around it. With traditional building techniques the land was impossible for home construction.

But with modern technology and engineering you can build almost anywhere. Applying two principles that aren't ordinarily used in residential work, builder Mark Rosenfeld has designed a prefabricated house that will sit firmly-and economically-on the neglected ledge.

 Construction—Rosenfeld's Ledgehill House is based on two principles: (1) a cantilever-type foundation and (2) "stressed skin construction" of the house itself.

Rosenfeld's idea was to put as much house as possible on a minimum foundation set against the ledge—that is, to have the main structure overhang its foundation. The cantilever construction of the underpinning makes it possible to support the overhang. Resting on eight to 12 concrete piers, the bulk of the house is about 4 ft. above the ground.

The walls, floors, and roof of the house are plywood. As individual units, the plywood panels are skinlike in thickness and are not strong. But attached to the frame under stress, pulled together tightly, they become a rigid unit with a structural strength matching conventional frame construction. It's the same principle that's used in making airplane wings.

After taking account of such features as these, the city of Boston, where building codes are about as strict as any place in the United States, has decided to approve the houses to keep abreast of modern technological developments.

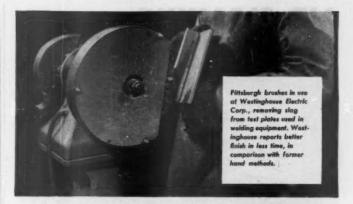
The lightweight materials used in the Rosenfeld house keep it from settling as conventional buildings tend to do. Moreover, since it hasn't thick walls or roof or heavy floors, it is cheaper to fashion and to put together than conventional construction.

• Financing—When the development is completed, the two-bedroom houses will sell for \$10,000 (\$500 down and \$70 a month), and the three-bedroom models for \$12,000 (\$650 down and \$85 a month). But Rosenfeld doesn't stop there. He has set up a financing system of his own that is as novel as his blueprints.

The way the setup works, Rosenfeld gets the money from the bank, not the home buyer. Then he turns the money over to the buyer as the responsible loaning agent. The peculiar feature of the deal is that he guarantees to buy the house back in two years if the owner doesn't like it.

He will rebate the down payment and equity paid in, so the buyer pays only the mortgage loan interest and the cost of reconditioning the house (if necessary). The loan interest, included in the \$70 a month for instance, amounts to only about \$45 a month for the two years.

 Rent or Buy—In a sense this arrangement makes the homes the equivalent of rental units. Rosenfeld had originally



Replace hand finishing with power-driven Pittsburgh Brushes for

Better Cleaning Lower Labor Costs Fewer Rejects

-as these companies did:

Removal of imbedded slag in welding test plates formerly was done by hand at the Westinghouse Electric Corp., Trafford, Pa., using a wire brush and welder's hammer. Pittsburgh brushes, powered by a ½ h.p. motor, now remove more slag in less time, and produce a better finish. In addition, Westinghouse reports their Pittsburgh brushes "stand up better than average in use."

Complete cleaning of dried contrete, rust and scale from steel frames used in concrete forming is essential prior to reusing the forms. Pittsburgh wire brushes were installed at the Universal Form Clamp Co., Chicago. Working on a conveyor-fed machine, the brushes now remove all foreign material at a rate of 50 pieces per hour, replacing former laborious hand brushing and scraping.

De-scaling preheated bar stock at the Dominion Forge & Stamping Co., Ltd., Canada, was formerly done by hand scraping. This never did a complete job, and inclusions resulted which produced defective forgings. Pittsburgh brushes, on specially-designed machines, now do the job, and have "increased efficiency, decreased the amount of scrap, improved work quality, and saved labor."

WRITE TODAY FOR FREE BOOKLET!

Write for a free copy of our booklet that shows, through actual case histories, how Pittsburgh cuts brushing costs. Address: PITTSBURGH PLATE GLASS COMPANY, Brush Div., Dept. WB-1, 3221 Frederick Ave., Baltimore 29, Maryland.





BRUSHES - PARTIS - SEASS - CHEMICAES - PERSINGS - PRIER SEAS

PITTSBURGH PLATE GLASS COMPANY



THIS BULLETIN HAS THE ANSWER - WRITE FOR YOUR FREE COPY!

Whatever your problem—dust, smoke nuisance, air pollution—"Buffalo" builds the unit to handle it effectively. "Buffalo" experience in washing air goes back to the turn of the century, and many of the original "Buffalo" units are still in operation. This experience has enabled us to develop the most efficient, compact, and easy-to-maintain units for every air cleaning problem.



- . "DC" STATIC AIR WASHERS
- . HYDRO-VOLUTE SCRUBBERS
- . WET GLASS CELL AIR WASHERS



. HYDRAULIC SCRUBBING TOWERS

For the most satisfactory and economical solution to your dust, fume or smoke problem, write now for Bulletin 3181-B.

BIG BATH FOR AIR!

A large "Buffalo" Static Air Washer keeping the air in a foundry clean.



FIRST FOR FANS BUFFALO FOR 458 BROADWAY BUFFALO, NEW YORK

PUBLISHERS OF "FAN ENGINEERING" HANDBOOK Canadian Blower & Forge Co., Ltd., Kitchener, Ont. Sales Representatives in all Principal Cities

FORCED DRAFT RCED DRAFT PRESSURE BLOWING HEATING COOLING
AIR CLEANING AIR TEMPERING INDUCED DRAFT EXHAUSTING

". . . he can tap the double market of renters and buyers . . "

HOUSING starts on p. 130

pre

tu

bu

R

m

th

B

Si

bu

10

cl

ce

th

be

sl

di

ex

de

to

th

th

intended to build the houses for rent, since there is a tremendous demand for single-family rental units. What stopped him was the fact that renters often don't take care of their places, which means a big maintenance risk. By selling the houses with provisions for buying them back, he puts the burden of maintenance on the buyer while in effect collecting rent. Equally important, he can tap the double market of buyers and renters.

• Scattered Arrangement-The Stony Brook Reservation development looks a lot different from the usual layout. Rosenfeld wanted to get away from the customary monotony of developments. He has oriented his community so that hardly a house faces in the same direction as the next one. There are only a few major roads, a maze of pedestrian walks.

From the air, the arrangement of homes and streets forms a crazy-quilt pattern. But Rosenfeld claims it is practical, and will cut the cost of utili-

· Prefab Job-In planning his development, the builder called in the best talent he could find. Carl Koch, former Harvard modern home specialist, did the original designs. United States Plywood Corp. worked with him on materials. E. F. Hodgson Co., Inc., of Dover, Mass., is making the paneled assembly, shipping it to the site.

For Hodgson, which began pre-fabbing "auto stables" around the turn of the century and now considers itself the oldest U.S. firm in the business. the project represents a big departure. Up to now, Hodgson has used prefabrication mainly to build high-quality houses, priced at \$10,000 to \$50,000. Usually the houses have been sold through a builder to private families, designed specifically to the tastes of the buver. The firm has stuck for the most part to traditional styling of fairly large homes resembling colonial Cape Cods. It has sold these mainly in New England.

Working with Rosenfeld, the company is now attempting to adjust itself to the demand for really low-cost construction and mass-production techniques.

For the first time, it is in the development business. If the project goes over well, the venerable firm may turn more of its efforts to the volume market and to spreading its name nationally, though it plans to continue building custom-designed houses.

First Customer

Alcoa's aluminum-clad skyscraper convinces New York builder to use same material in an office building.

This week brought the first payoff for the strategy that Aluminum Co. of America has been using to plug its product as a building material.

Alcoa decided to demonstrate the virtues of aluminum by using its own home office in Pittsburgh. The Pittsburgh building (BW—Mar.29'52,p72) is but newly finished, yet it has already attracted its first customer. Tishman Realty & Construction Co., Inc., announced plans for a 26-story office building, with an all-aluminum facade, on New York City's Park Avenue.

Changed Plans—What's more, Tishman said it had originally planned to use a conventional masonry facade on the new building. Then it took a look at the aluminum alloys being used in the Alcoa building, and promptly had a series of tests made by the General Bronze Corp. The tests were conclusive; Tishman shifted its plans.

Norman Tishman, president of the building company, said the chief advantages lay in efficiency and appearance. The aluminum would keep a look of newness for years, and it is self-cleaning. On top of that, it offers exceptional tightness to water and weather.

The Tishman structure won't be the first aluminum-clad building by any means, but the builder says it will be the first such skyscraper planned for general business occupancy, and erected by a private builder.

Alcoa pioneered in the field with an experimental building for its own use in Davenport, Iowa (BW-Jul.9'49, p42). Encouraged by the results and fortified by construction experience, Alcoa then got going on the huge Pittsburgh building that was to be its supersalesman.

Judging by this week's Tishman announcement, the Alcoa building is doing its job.

 Panels—The Tishman building will be air-conditioned. Its aluminum sheathing will consist of about 1,800 die-pressed wall and window panels bolted to the building's framework. Each panel will be two-stories high, with two large reversible windows.

The glare of sunlight on the huge expanse of aluminum will be toned down by the infusion of a gray tone into the metal. The faceted pattern of the panels will create changing patterns and appearances as the sunlight strikes the walls at different times of day.



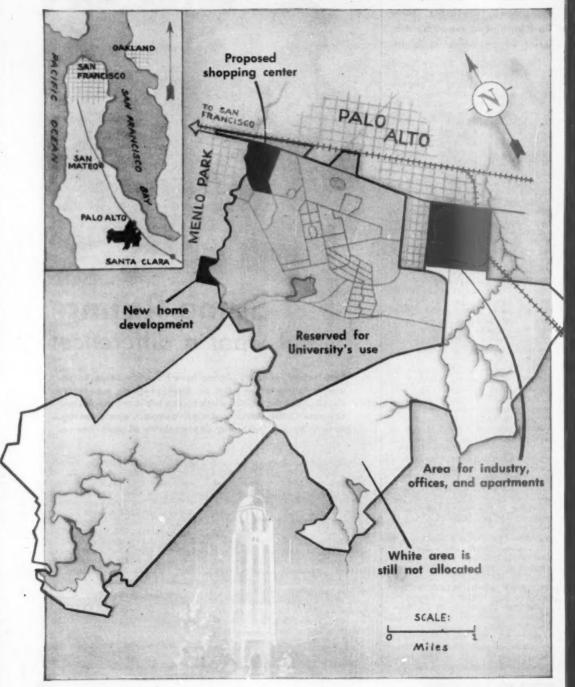
Both safety switches shown here have the same horsepower rating when used as disconnects on a.c. motor circuits. But the small switch on the left is the revolutionary new Cutler-Hammer design, compact, space-saving, easy to handle, with new dependability of performance.

Up until now safety switches have invariably been much larger than the motor control with which they have been used. This has created difficult installation problems. Even when space was available, their bulk and weight made mounting difficult; and the much larger size of the safety switch in such close relation to an associated control enclosure has simply been all out of proportion to the latter. This detracted from the appearance of the complete installation.

Cutler-Hammer engineering has ended all this as far as a.c. motors are concerned. The new and exclusively Cutler-Hammer Bulletin 4110 line of Horsepower Rated A.C. Motor-Circuit Safety Switches saves as much as 65% in size, and matches safety switch and motor control in size, convenience and dependability. These switches are available in ratings from 3 h.p. to 30 h.p., 230 volts a.c. and from 7½ h.p. to 50 h.p., 575 volts a.c. These switches have many features and have no substitutes even remotely comparable. CUTLER-HAMMER, Inc., 1275 St. Paul Avenue, Milwaukee 1, Wisconsin.



Land-Poor Stanford Opens Its Acres or



Uni "Th

nort

coul with

as if inco trick year way

elec

hard

too, Lela hear

larg and pret tive pro

chr

lots

the Fra cisc dre min eve the

out

cas

nal was bui

tho

BUS

9-Yr. Leases

For more than 50 years, Stanford University has earned its nickname, "The Farm," by raising hay on 6,000 acres of some of the best real estate in northern California. Forbidden by its charter to sell the land, the university couldn't think of anything else to do with it.

In the next 50 years, though, it looks as if Stanford will get less hay and more income out of its acres. Borrowing a trick from eastern universities—the 99-year lease—it has finally figured out a way to develop its real estate.

This month Stanford signed up its

This month Stanford signed up its second commercial tenant—Eastman Kodak took a 99-year lease on a 10-acre site for a laboratory. Varian Associates, electronics manufacturer, which had signed the first lease, is expanding its holding. And plans are being pushed hard for a shopping center and for housing developments to be carved from the Stanford domain near Palo Alto.

 Founding—Usually, people think of Stanford as being filthy rich. It was, too, in the years after 1886, when Sen. Leland Stanford and later his widow heaped money and land on the institution they had founded in memory of their sen.

Trouble was that Stanford, born with a silver spoon in its mouth, was slow to go out and scratch. While other and often older institutions were digging large endowments from their alumni and anyone else with money, Stanford pretty much sat back. Also, being relatively new, it didn't have a stockpile of prosperous graduates.

Then in the depression of the 1930s some investments turned slightly sour. The university, pushing into new fields of education and research, found itself chronically needing more money.

• Land-Poor—One thing Stanford had lots of: land. Sen. Stanford had set the school up with an 8,640-acre grant on the valuable eastern slopes of the San Francisco. Even today, in their wildest dreams of expansion, the university administrators can't imagine that they'll ever want more than 2,640 acres for their own purposes. That leaves 6,000 choice acres, lying athwart the suburban outward growth of San Francisco along a main highway, El Camino Real.

For years the university had wistful dreams of extracting some money from its land. But the Stanford charter had a cast-iron clause: Not an ell of the original grant could be sold. The university was land-poor. Sinking money into building for rental was out of the question. That left the alternative of leasing hunks of land for long terms. Stanford thought that 99 years would be a nice



in WIRE ROPE, too It's all in the RIGHT KIND of Muscle

The powerful, rugged muscles of a charging rhino enable him to propel his tremendous bulk and weight at truly remarkable speed. Nature designed them well for the purpose they have to serve.

In wire rope, too, the right kind of muscle is vitally important . . . because different types of jobs present different types of destructive forces. Bending fatigue! Shock stress! Abrasion! Load strain! Each demands wire rope that best combines the required resistance characteristics.

Wickwire Rope gives you the benefit of long experience and specialized know-how which assures you of exactly the right kind of rope your particular job demands.

See your Wickwire Rope distributor or contact our nearest sales office.



A YELLOW TRIANGLE ON THE REEL IDENTIFIES WICKWIRE ROPE

WICKWIRE SPENCER STEEL DVY.—Buston-Parlfuln-Chattenoogn-Chicage-Datroit-Endonton (Pa.)-Philadalphia-New York
THE COLORADO FUEL AND IRON CORP.—Abiliona(Tex.)-Denver-Nouston-Odessa (Tex.)-Phoenix-Seit Loke City-Tulsia
THE CALIFORNIA WIRE CLOTH CORP.—Los Angeles-Oakisnd-Portland-San Francisco-Santila-Spokusa

WICKWIRE ROPE



FIRST AID STATION

for your fire-fighting equipment

When the fire is over, you don't have to send to Timbuktu to get your fire-fighting equipment back into shape. Just call your local Kidde Recharging Service Station.

Everything from your hand portables to your built in carbon dioxide systems will be inspected, repaired and recharged by the finest servicing organization in the world. That's a primary consideration in the purchase of fire-fighting equipment.

Remember, wherever you are, there's a Kidde Service Station within easy reach. Look in the 'yellow pages' of your local telephone directory.



Walter Kidde & Company, Inc., 1225 Main Street, Belleville 9, N. J. Walter Kidde & Co., of Canada, Ltd., Montreal, P.Q.

"... an ideal community, unhampered by crass thoughts of adequate income . . ."

STANFORD LEASES starts on p. 134

term for a lease, and dreamed of customers.

Until the end of World War II customers just weren't. What little spreading out there was from San Francisco could easily be accommodated on land that was for sale. Stanford leases simply were not attractive.

 Postwar—The stepped-up tempo of growth after the war changed all that.
 The peninsula filled up rapidly; industries, builders, and home-seekers all cast loving eyes on the Stanford property.

The university ogled right back. Administrators decided, though, that the development had to be carefully planned. The goal was an ideal balance of tidy smokeless-type plants, housing, and general community development; the university wanted only suitable neighbors.

Alf E. Brandin, Stanford's business manager, took over the planning, which now consumes most of his time. First step was to have an elaborate topographical survey, then carve out the biggest chunk that the university could imagine using. To that was added a generous extra band just in case. All this was set aside.

• Program—Next, the university called on an assortment of city planners, real estate men, and engineers to do some advising. The advice, it turned out, was just as assorted as the advisers.

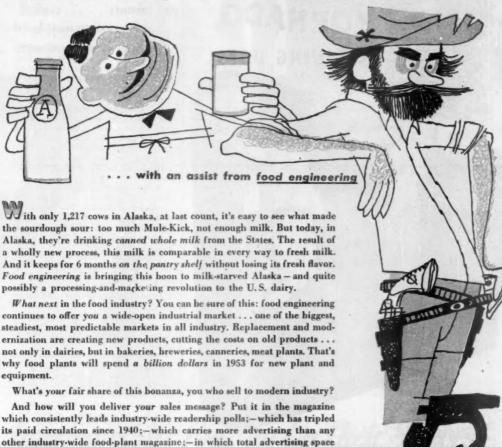
The city planners, according to Brandin, worked out an ideal community all right, unhampered by crass thoughts of adequate income from the land. Thus they urged a greenbelt on the valuable commercial frontage of El Camino Real.

The real estate men took a slightly more sordid view. Industrial tenants are worth several times their residential brethren, and the experts recommended sowing the tract lavishly with small factories, with a minimum of living quarters.

The engineers, for their part, had a slide rule field day. They based their plans on a magnificently efficient utilization of water supply, sewers, and drainage; few notions of landscaping or monetary return seemed to cloud their thinking.

Brandin and his aides took this potpourri of ideas, and tried to extract from it a golden mean. They are still trying.
• First Moves—In any case, the university has been launched on practical development since early 1951. That's when Varian Associates signed up for

They've sweetened up the SOURDOUGH

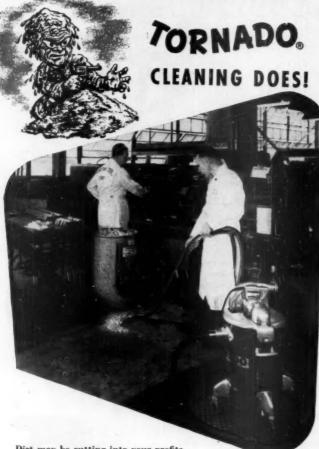


Advertise in FOOD ENGINEERING.

is up, up, up in 1952.



DIRT DOESN'T PAY DIVIDENDS



Dirt may be cutting into your profits just like this case of the Federal Tool Corporation. Molding light colored plastic, they found that a single particle of dirt in a cavity meant scrapping the entire piece.

These costly scrap losses had to be stopped. How? With more efficient cleaning methods. Now they're using Tornado cleaning with the machine that pulls air at 300 M.P.H.

What's more, it picks up water, oils, scrubbing solutions and metal chips just as easily as dirt. It quickly converts to a blower or shoulder-type vacuum... cleans everything from floor to ceiling.

If you want to stop dirt from sharing in your plant profits write for Bulletin 600 today.



Motor unit becomes powerful blower to clean motors, machinery and equipment.

BREUER ELECTRIC MFG. CO.

5104 N. Ravenswood Ave.

Chicago 40, Illinois

"... Stanford is keeping a strict eye on the quality of its tenants ..."

STANFORD LEASES storts on p. 134

a 10-acre plot on which its \$1-million electronics lab is being built. Now Varian has taken six more acres, for expansion. Eastman expects to build a \$2-million lab for processing film on its tract.

In the residential direction, Stanford had been leasing homes for some time, but only to university personnel. Last spring it gave a long lease on a 15½-acre plot to Peninsula Pacific Construction Co. This company plans to build 45 rental homes on the tract, open to all comers.

At the same time, educational prospects were brightened for the development's future children. Stanford agreed to a friendly condemnation suit on 84 adjacent acres by the Menlo Park Elementary School District, which is running up a new school.

Biggest project of all, but still in the future, is an integrated regional shopping center, planned for a 60-acre tract fronting on the heavily traveled Camino. Welton Becket, well-known designer of retail stores, has been retained to draw up the preliminary plans. The project will probably be built around a branch of a San Francisco department store.

• Restrictions—With these projects on the fire and—it hopes—bigger ones to come, Stanford is keeping a strict eye on the quality of its tenants. Factories often mean smoke and noise, which, as Brandin points out, are not wanted as backdrop for a university, or even for a tidy commuting town like Palo Alto, across the road. So Stanford is looking for shiny-faced plants like laboratories and pharmaceutical manufacturers. It also thinks an insurance company or two might make excellent tenants.

The university keeps a tight rein on the tenants. Each lease contains a clause requiring a Stanford O.K. on site plans-placing of buildings, parking areas, and the like—and on the exterior design of all buildings. That, plus integrated planning for the whole area, is expected to protect tenants and university.

Here's how Stanford works toward integration. A given tract is laid out with so many acres for industry, so many for offices, so many for shops. Then tenants are sought. But Stanford doesn't try to peddle specific lots. Instead, it tells the prospective tenant about the whole area, asks him what he needs. Eventually, his plans and those of others will be fitted together like the parts of a jigsaw puzzle.



Americans Are Rolling Up Their Sleeves!

YES, ALL KINDS OF PEOPLE ARE GIVING BLOOD SO THAT OUR WOUNDED MAY LIVE!

Today, the blood of a Boston bookkeeper may be flowing through the veins of a wounded kid from a Kanass farm...the blood of a pretty Southernhousewife may have saved the life of a grizzled leatherneck. For, blood is blood, a God-given miracle for which there is no substitute... and when a man's life hangs in the balance and blood is needed, there is nothing else to take its place!

Right now the need for blood is urgent. In hospitals —at home and overseasmany men require four and six transfusions during delicate operations. And the blood must be there—when it's needed. So give the most precious gift of all—your blood!

Be assured that giving blood is neither difficult nor distressing. And what a thrill there is in knowing that you've performed a really unselfish act! So call your local American Red Cross today and make an appointment. And tell your friends and neighbors about your experience. Let them share the wonderful feeling Americans get when they roll up their sleeves—and give blood,

But-

WHAT HAPPENED TO THAT PINT OF BLOOD YOU WERE GOING TO GIVE?



"Call Your American Red Cross Today!



COVERNMENT



W. L. DAVIDSON welcomes business inquiries on how private enterprise can enter nonmilitary atomic fields. He keeps . . .



FULL FILES on his visitors, often is able to match up a company with some new opportunity. He's the key man as . . .

AEC Bids Business Join the Feast

Someday private enterprise will own and operate nonmilitary atomic energy industries that will dwarf the present huge government-owned bomb-making machinery. Just about everyone in and out of government agrees on that.

The Atomic Energy Commission has already taken the first steps. Hitherto, business has entered the atomic picture only as the paid—and strictly watched —agent of AEC. Now the commission is issuing its first tentative invitation for businessmen to take over the civilian aspects of atomic energy, pretty much on their own terms. The response has been active.

 New Office-Last May AEC hired 37-year-old William Lee Davidson, director of physical research for B. F. Goodrich Co., to run its new Office of Industrial Development. His main job: to stimulate business interest in the commercial aspects of atomic energy. In effect, AEC figures that the day is near when the U.S. stockpile of atomic weapons will be adequate for any foresceable needs. When that happens, there will be a surplus of fissionable materials available for nonmilitary uses. Meanwhile, it's high time to start thinking about lifting part of the security veil from atomic data.

AEC knows that business will have to know a lot about present secrets before it can get its teeth into atomic development. But the commission will make haste slowly, despite the broad declassification powers that are given to it by the Atomic Energy (McMahon) Act of 1946. It is likely to wait for congressional permission before telling much: and Congress has shown itself even more secreev-minded on the atom than is AEC itself.

 Venture—Meanwhile, Davidson and his OID hope to sell business on the idea that atomic energy is "a venture in which they should be willing to risk their own capital." And they have the job of answering business inquiries.

Davidson isn't spilling any atomic secrets. But when businessmen come in with legitimate questions, he either answers them or guides them to the right spot in AEC's labyrinthine organization.

• Experienced—He's no green newcomer to the atomic program. At Goodrich, he was up to his ears in work for AEC. Before that, he had attended the first class in reactor technology given at Oak Ridge.

Even so, Davidson spent most of his first six months just learning his way around AEC's Washington headquarters and the operating facilities.

He's still "educating" himself. It's his job to learn everything he can about AEC activities that might be of interest to business. One inquiry can, and often does, involve checks into research,



You're looking at one right now! This conglomeration of pipes and valves is called a "Christmas Tree." It controls the oil from Sinclair's flowing wells and is one of the many steps between crude oil in the ground, and the hundreds of petroleum products you use ... products which continually pour from Sinclair refineries.

The Sinclair refinery story is one of improvement and progress. In 1951, crude throughput averaged over 355,500 barre's daily, or a total of over 129,759,265 barrels a year. This figure represents an increase, since 1949, of over 36.4 percent, or 34,650,454 barrels. Major construction, to be completed during 1953 at the Houston refinery, will further increase the crude charging capacity of Sinclair plants to the extent that crude processing can be increased to more than 400,000 barrels per day.

Through efficient planning and increasing production of its strategically located refineries, Sinclair has become a major refiner in the highly competitive petroleum industry.

SINCLAIR A Great Name in Oil

clues:

to the solution of management men's problems

Published enery week—closes 12 days in edeomer. Rate— \$5.00 per line (\$3.50 per line for position wented sis), minimum 3 lines. Allow 5 correge words on line; const 2 words for has number. Address hes number regites to Business Week to office words you. NIV YORK, 350 W. 42nd 81. CHICAGO, 350 N. Michigan Acc., SAN FRAN-CISCO, 68 Past 81,

EMPLOYMENT

Positions Wanted =

College and family man with 13 years experience management, purchasing and marketing available immediately to national manufacturer interested opening sales branch in Seattle, Best references. Box 6321.

Executive of Managerial Air Force Procurement Officer completing tour January. Solid practical background in Industry. Married, age 32. Box 6318.

Selling Opportunities Wanted

Are you getting your share of business from
New England? Highly successful young salesman seeks permanent connection with sound
potential. Finest of references. Box 6224.

SPECIAL SERVICES

Special Machinery on a no risk basis—Our Design staff of over 200 can solve your problems—Machines designed and built at no risk to you. Mechaneers incorporated, Bridgeport, Conn.

BUSINESS OPPORTUNITIES

Profit Opportunity for lifetime business. Start a Venetian Blind Laundry. New Machine. You can aim at a first year \$15.000 profit. L. C. Co., 442 N. Seneca, Wichita 12, Kansaa.

Co., 442 N. Beneca, Wichita 13, Kansana.

Supervisor Wanted—Spore Time to stort—\$500
per month possible. A national Concern with
excellent references from banks. Chamber of
Commerces, etc., needs high byte of
Commerces, etc., needs high byte vertised
discrebandies to established retail outlets. Honesty and reliability more important than past
experience. No Seiling or Solicting, All equipment is owned by Company and not for saie, but
able car and \$1,080.00 to \$3,240.00 cash required,
which is secured by mérchandies. Four to Six
hours weekly required for bookkeeping and to
deliver merchandies to our legal vending madeliver merchandies to our legal vending masible, with very good possibilities of taking
over full time, income increasing accordingly.
Please do not answer this advertisement unless
you have the required amount of cash available,
who can make and give a definite decision after
who can make and give a definite decision after
you know the facts. We are only interested in
people who can start immediately. For personal interview, write fully about yourself, include phone number, to Box 4321.

EQUIPMENT

For Sale =

Executive Airplane for sole: Two-motored Beechcraft executive type airplane with crulsing speed of 200 miles per hour. Condition above average and priced about half cost of new plane. Owner does not have need for two planes of this type. Ready for immediate service. Opcrational costs gladiy furnished upon request, Paul J. Rennard, Chief Plot, Joy Manufacturing Company, Franklin, Fla. Phone 651-X.

Hydraulic Presses, self contained, motor driven hand operated, automatic, & semi-Automatic, for every industry. Write for catalog. Clifton Hydraulic Press Co., PO Box \$25, Clifton, N. J.

Motor Generator Sets-IKW to 2000KW. Electric Equipment Co., Rochester, N. Y.

MISCELLANEOUS

Only Directory of 10,000 U. S. Form Cooperatives. Cooperative Digest, Ithaca, N. Y.

When Answering BOX NUMBERS . . .

to expedite the handling of your correspondence and avoid confusion, please do not address a single reply to more than one individual box number. Be sure to address separate replies for each advertisement.



OPEN DOOR. Davidson vows he'll see any businessman who knocks at his office.

development, and the legal department.

• Case History—Take the dental equipment maker who wrote to ask if he could produce radiation instruments. Davidson set up an interview; the manufacturer found the little AEC office crowded. Besides Davidson and his assistant, David Z. Beckler, there were several radiation experts waiting. These could tell the dental man whether he had the kind of plant he needed. After a brief discussion, they said he did.

By phone, Davidson then arranged another interview with a subcontractor who could pass on some production knowhow. Further help was asked in letters to other people.

With all the needed preliminary information in hand, the dental manufacturer is now conducting a market survey to decide what type of instrument he should turn out.

• Clearinghouse—This whole function of OID was originally conceived by former AEC Commissioner T. Keith Glennan, who has since returned to his job as president of Case Institute. Glennan had found that an information clearinghouse at AEC was the thing most needed to broaden business activity. Suppose a company wanted to make equipment for AEC. How could it determine whether the product it had in mind was wanted, or if there was something else it could make? Even companies already working for AEC had only the most strictly compartmented knowledge of what went on.

Despite this, and even before OID, the commission had helped start two booming private industries. The use of isotopes—subatomic particles produced in reactors—is expanding fast in research and commerce. From this has blossomed the manufacture of radiation instruments, now grossing \$15-million a year and growing fast.

• Power Production—Most promising

 Power Production—Most promising development of all, and the one Davidson is plugging hardest, is the use of atomic fuel to produce electric power.
 Before too long the government will have an atomic power plant capable of driving a submarine. That means that the knottiest engineering problems for a power reactor will have been solved, but not the economic ones. The submarine reactor will cost 40 or 50 times more than a comparable plant using conventional fuel. That's all right for a weapon, but not for commercial power production.

h

110

at

m or th

W

ha

th

th

ar

th

ra

fr

ca

ri

01

bi

SC

in

58

A

d

re

tl

Ptl

w

S

ir

C

W

to

W

n

t

B

Davidson points out that these costs won't go down until industry really gets to work on nuclear equipment on a commercial basis. What's needed are the best brains of the electric equipment industry—from heat exchange experts to valve makers—and none of them working on a military cost-plus-and-hurry-up basis.

"It's a gamble, a tremendous gamble," Davidson concedes: "The risks are extremely high. But so are the potential rewards."

His favorite analogy is the early days of the internal combustion engine. "As then," he says, "there will be the Stars, the Durants, the Hupmobiles, and the Maxwells to blaze up and fade away. But there will also be the Fords, the Chevrolets, the Chryslers, and the Cadillacs."

• Interest Spreads—Apparently, a growing number of businessmen share this view. Davidson is in constant demand as a speaker; and his list of callers is even more impressive. He has talked to representatives of 175 industrial companies since he first came to Washington and announced: "I'll talk to any businessman who knocks on my door."

His callers fall into four categories:

Those who want to sell products to AEC—everything from raw materials to office furniture.

 Those who want to do a job for the commission—research, contract, or subcontract.

 Those who want information or help. In this group are companies (1) that want to keep posted on AEC generally; (2) that want specific information in their own fields; and (3) that "... the businessman who wants to put in money of his own ..."

ATOM BUSINESS starts on p. 140

wint help in scaling the secrecy barriers.

• Those who want to go into business of their own in some phase of the atom industry. Of Davidson's first 175

atom industry. Of Davidson's first 175 callers, 13 fell into this category. He hopes they will some day become the majority. "We still want to see everyone," he says. "But the businessman the program needs most is the one who wants to put his own money into it."

Only a dozen of Davidson's callers have had anything to sell. Usually, they're satisfied when he gives them the AEC booklet listing its contracting

and purchasing offices.

• Filing System—On the companies that want research or development jobs, Davidson keeps a detailed file. These range—there have been 42 of them—from a "hot" laboratory in Wisconsin capable of handling fissionable materials, to a majo "hemical company seeking a prime contract to eperate an AEC plant.

Such callers are asked to file a report on their facilities and technical capabilities. Davidson keeps well briefed on AEC business. When he hears of something relating to one of the fields in question, he fishes out the file. The system has already paid off for both

AEC and its callers.

 Inquiries—Requests for information run a full gamut. Some railroad men dropped in, alarmed by "enthusiastic" reports that nuclear power might kill their payload—hauling coal to power plants. Davidson was able to soothe them with the news that nuclear power was more than a decade away, and even then would not supersede conventional fuel.

A chemicals company, already subcontracting for AEC, wanted to find other fields. Davidson told them about several unsolved problems, now hinder-

ing AEC operations.

Different was the query of the ice cream maker who became alarmed when he heard that a radioactive gadget was used to test butterfat content of his milk. Davidson convinced him the test was harmless.

He's stumped by one series of letters from the Midwest. Each is covered with indecipherable formulas and ends with the plea: "Help me! They're after me-and they're using atoms."

 Nibbles—The people who want to get into atomic business are chiefly interested in isotopes or other radioactive materials, or else want to produce radiation instruments. Davidson sees that they get all the technical help possible.

ADVERTISERS IN THIS ISSUE

Business Week-December 20, 1952

	LEGACO STEEL OO And From
AFTHA LIFE AFFILIATED COMPANIES	Agency—Bond & Starr, Inc.
Agency-Wm. B. Remington, Inc.	KAISER ALUMINUM & CHEMICAL CORP 71
Agency-Young & Rubicam, Inc.	KEASBEY & MATTISON CO
AMERICAN GAS ASSOC 47	Agency-Geare-Marston, Inc.
THE ADVERTISING COUNCIL 120 AETNA LIFE AFFILIATED COMPANIES. 60 AEROCA—W.B. R. Reinington, San. 110 AEROCA—W.B. R. Reinington, San. 110 AEROCA—Young & Rubicam, Jin. 110 AEROCA—TOUNG & Rubicam, Jin. 110 AEROCA—TOUNG & Rubicam, Jin. 110 AEROCA—The Alfred Colle Co. 47 AGENCY—The Alfred Colle Co. 34 AMERICAN TELEPHONE & TELEGRAPH CO. 1 "AUTOMATIC" APRINKLES CORP. 07 AMERICA 50 AGENCY—The Hichard A. Foley Adr. ASSES, Inc. 34 AGENCY—The Hichard A. Foley Adr. ASSES, Inc. 34 AGENCY—Christopher, Williams & Bridges THE BASSICK CO. 36 AGENCY—The Fondad Chirus Co., Inc. 80 ALTIMORE & OHIO RAILBOAD AGENCY—The Fondad Chirus Co., Inc. 36 AGENCY—The Fondad Chirus Co., Inc. 80 AGENCY—The Fondad Chirus Co., Inc. 80 AGENCY—The Fondad Chirus Co., Inc. 81 BLDEN MYG. CO. 48 BELLOW RYG. CO. 413	JERROP STEEL CO. 2nd Cover American Enod & Shart Inc. KANSER ALUMHUUN & CHIMICAL CORP. 71 Agency—Toung & Robiesm, Inc. KEASSEY & MATTISON CO. 115 Agency—Coung & Robiesm, Inc. 63 Agency—Councingham & Walsh, Inc. 136 Agency—Cunningham & Walsh, Inc. 137 Agency—Counningham & Walsh, Inc. 138 Agency—Counningham & Walsh, Inc. 138 Agency—Counningham & Walsh, Inc. 139 Agency—Counningham & Walsh, Inc. 148 Agency—Counningham & Walsh, Inc. 157 Agency—
Agency—The Alfred Colle Co.	Agency-Cunningham & Walsh, Inc.
Agency-N. W. Ayer & Son, Inc.	LIBERTY MUTUAL INSURANCE CO 7
"AUTOMATIC" SPRINKLER CORP. OF	LURIA ENGINEERING CORP
BABCOCK & WILCOX CO	Agency—Storm & Klein, Inc.
BALTIMORE & OHIO RAILROAD	Agency—Fuller & Smith & Hoss, Inc.
Agency-The Richard A. Foley Adv. Agency, Inc.	MATHIESON CHEMICAL CORP
Agency-Christopher, Williams & Bridges	THE MeBEE CO
THE BASSICK CO 70	Agency-C. J. LaBoche & Co., Inc.
BELDEN MFG. CO	Agency—C. J. LaBoche & Co., Inc. HEAD CORP. Agency—Gray & Rogers Agency—Gray & Rogers Agency—Wilto & Burdes HELLINK STEEL SAFE CO. Agency—W. B. Doner & Co. METALS & CONTROLS CORP. SPENCER THERMOSTAT DIV. 05
Agency—The Fensholt Co.	Agency-Witte & Burden
Agency—The Fensholt Co. BELLOWS CO. 113 Agency—Ralph Gross Adv., Inc. BENDIX AVIATION CORP. 4-5 AGENCY AVIATION CORP. (FRIEZ INSTRUBERT DIV.) (54 Agency—MacManus, John & Adams, Ins. BLAW-KNOX CO. 40	MEILINK STEEL SAFE CO 70
Assency-Machianus, John & Adams, Inc.	METALS & CONTROLS CORP.,
BENDIX AVIATION CORP.	SPENCER THERMOSTAT DIV
Agency-MacManus, John & Adams, Inc.	APROCA THERMOSTAT DIV. AGROCA-BUTCHAIN LIFE INS. CO
BLAW-KNOX CO 40	Agency-Young & Hubicam, Inc.
BRAINARD STEEL CO	CO
Agency—The Griswold-Eshleman Co.	MONSANTO CHEMICAL CO
Agency—Grimm & Craigle	Agency—Gardner Adv. Co.
Agency—Raiph Gross Adv., Inc.	Agency-The Cramer-Krasselt Co.
BROWN & ROOT, INC	NEW DEPARTURE DIV., GENERAL
CHARLES BRUNING CO	Agency-D. P. Brother & Co., Inc.
Agency—James Thomas Chirurg Co., Inc.	Amprey-Batten, Barton, Durstine & Osborn, Inc.
Agency—Hicks & Greist, Inc.	THE OSBORN MFG. CO
BUFFALO FORGE CO	OTIS MCALLISTER & CO
BUSINESS WEEK125	Agency—Albert Frank-Guenther Law, Inc.
CHASE BRASS & COPPER CO., INC 55	Agency—Joseph Reiss Assoc.
CHESAPEAKE & OHIO RAILWAY CO 84-85	Agency—R. E. Lovekin Corp.
CLARAGE FAN CB	PENNSYLVANIA SALT MFG. CO
Agency-William J. Williams	Agency-Geare-Marston, Inc. PITTERURGH PLATE GLARE CO
CFRIEZ INSTRUMENT DIV.) (44 Agency—MacManus, John & Adams, Ins. BLAW-KNOX CG. 40 Assect—At Poul Let'on Co., Inc. 40 Assect—The Griswold-Enhieman Ce. BRUER RECTRIC MFG. CG. 130 Assect—The Griswold-Enhieman Ce. BRIDGWATER SACHINE CO. 61 BROWN & ROOT, INC. 61 Assect—Inc. 100 CMARLES BRUNING CG. 100 CMARLES BRUNING CG. 100 ASSECT—The Griswold-Enhieman Chirurg Co., Inc. 100 BUSTALO FORGE CG. 100 BUSTALO FORGE CG. 100 CHESHERS WEEK. 125 CHASE ST. 100 CHESHERS WEEK. 125 CHASE ST. 100 CHESHERS WEEK. 125 CHASE ST. 100 CHESHERS CG. 100 C	Agency-Maxon, Inc.
Agency-Doyle, Kitchen & McCormick, Inc.	(WIRE BRUSH DIV.)
Agency—William J. Williams ELUES COLORADO FUEL & IRON CORP. 135 Agency—Doylo, Kitchen & McCormich, Inc. COLUMBIA UNIVERBITY PRESS. 76 Agency—Trankin Spier, 800, 800, 800, 800, 800, 800, 800, 80	Agency-VanSant, Dugdale & Co., Inc.
CONTAINER CORP. OF AMERICA Srd Cover	Agency-Roche, Williams & Cleary, Inc.
CONTINENTAL MOTORS CORP 46	Agency-Leeford Adv. Agency, Inc.
Agency—Cummings & Hopkins CHT: FR. HAMMER INC	REYNOLDS METALS CO
Agency-Kirkgasser-Drew	RHINELANDER PAPER CO
Agency—Horton-Neyes Co.	Agency—Frank C. Nahser, Inc.
Agency—Horton-Neges Co. OWELL, 1806. Agency—MacManus, John & Adams, Inc. 14 Agency—MacManus, John & Adams, Inc. 190 Agency—Batten, Barton, Durtline & Osborn, Inc. FRARCH SERVICES, INC. 67	Agency-W. S. Roberts, Inc.
E. I. du PONT do NEMOURS & CO 90	Agency Albert Frank-Guenther Law, Inc.
Agency—Batten, Barton, Durstine & Osborn, Inc.	SALOMON BROS. & HUTZLEP 76
Agency—Batten, Barton, Durritine & Osborn, Inc. EBAGOS ERVICES, INC. 67 Agescy—Albert Frank-Geenther Law, Inc. EMPLOYERS MUTUAL LIABILITY INS. CO. 07 WISC. 54 Agency—Green-Marrisus, 54 Agency—Grey Adv. Agency—Grey Adv. Agency—Batten Co. 67 Agency—Grey Adv. Agency, Inc. FLYIMG TIGER LIMES, INC. 64 Agency—Harbon & Jorgensen Adv., Inc. 54 FOLLAMSEE SITEL COLOR OF THE CO. 55 FOLLAMSEE SITEL COLOR G. 57 FOLD G. 57 FOLLAMSEE SITEL COLOR G. 57 FOLLAMSEE SITEL COLOR G. 57 FOOD ENGINEERING. 57	Agency—Voung & Bablean, Inc. HINNEAPOLIS—HONEYWELL REGULATOR CO. Agency—Atthin Kymeti Co. Agency—The Cramer Adv. Co. Agency—The Cramer Adv. Co. Agency—The Cramer Kymeti Co. Agency—The Cramer Kymeti Co. Agency—Batten, Barton, Durstine & Gabora, Inc. THE OBSORM MFG. CO. Agency—Abtert A. Co. Agency—Abtert
Agency-Geare-Mariting, Inc.	Agency-Harry Serwer, Inc.
EMPLOYERS MUTUAL LIABILITY INS.	Agency—Doremus & Co.
Agency—Hamilton Adv. Agency, Inc.	American Prote Cone & Belding International
Assert Adv. Assert Inc.	SURFACE COMBUSTION CORP.
FLYING TIGER LINES, INC	Agency—The Jay H. Maish Co.
FOLLANSBEE STEEL CORP	TOLEDO SCALE CO
Agency-Ketchum, MacLeod & Grove, Inc.	TUBE REDUCING CORP
FOOD ENGINEERING	Agency—Michel-Cather, Inc.
FOOD ENGINEERING. 137 FRICK CO. 48 Agency—Waynesboro Adv. Agency GENERAL METALS CORP. 19 Agency—The McCarty Co. GENERAL MOTORS CORP. (FRIGIDAIRE DIV.) 23 Agency—Foote, Conv & Fielding GENERAL REFRACTORIES CO. 43 Agency—The McCarth & Cilinani, Milliani THE B. F. GOODRICH CHEMICAL 4th Cover	Agency-The McCarty Co.
Agency—The McCarty Co.	Agency-Fletcher D. Richards, Inc.
GENERAL MOTORS CORP. (FRIGIDAIRE	VEEDER-ROOT, INC 2
Agency—Foote, Cone & Belding	VIKING PUMP CO
Agency—Lewis & Gilman, Inc.	Agency-Walter E. Battenfield Co.
THE B. F. GOODRICH CHEMICAL	Agency-Cayton, Inc.
Agency—The Griswold-Eshleman Co.	Agency—Arthur R. Mogas, Inc.
CHEMICAL DIV.)	WARNER & SWASEY CO
Agency—Kudner Agency, Inc.	TOLDO SCALE UNITED STATE OF THE
Agency-G. M. Basford Co.	Agency-Fuller & Smith & Sloss, Inc.
THE B. F. GOODRICH CHEMICAL CO. Agency—The Griswold-Eshleman Co. Agency—The G. RUBBER CO., INC. (CHEMICAL DIV.)	WARREN WEBSTER & CO 3
H. M. HARPER CO	WELLINGTON SEARS CO
HILTON HOTELS CORP	Agency—Ellington & Co., Inc.
Agency-Needham & Groshmane, Inc.	(STURTEVANT DIV.)
STATE OF THE COMP. M. M. HAPER CO	Agency—Fuller & Bnoth & Boos, Inc. WARREN WEBSTER & CO. 3 Agency—William Jenkins Advertising WELLINGTON SEARS CO. 117 Agency—Ellington & Co., Inc. WESTINGHOUSE ELECTRIC CORP. (STUNTIVART OIV.) 15 Agency—Buller & Smith & Ross, Inc. WORTHINGTON DORP. 97 Agency—More Thomas Chilerer Co., Inc. YOUNGSTOWN BEEL CAR CORP. 92 Agency—More & Etc. CAR CORP. 92 Agency—More & Thomas, Inc.
Agency—Young & Rubicam, Inc.	Agency—James Thomas Chirurg Co., Inc.
JACK & HEINTZ INC	YOUNGSTOWN STEEL CAR CORP 92
Agency—Fuller & Smith & Hoss, Inc.	regress) process to a revended, Albert

Business and Crime on the Waterfront

Every decent citizen is horrified by the facts that the State Crime Commission uncovered during its investigations of criminal activity in the New York waterfront. But businessmen are especially concerned. That's because the main victims of waterfront racketeering are shipping and trucking companies, which are mulcted by top labor bosses who control the stevedores on the piers.

Business has always been a chief target of organized crime. No one knows how much of its income is siphoned off each year through extortion, shakedown, and "protection." But the sum runs into many millions. Too often businessmen take the situation as part of the game,

charging extortion up to profit and loss.

Not all of them, though, have adopted this attitude. In several major cities—New York, Baltimore, Philadelphia, Chicage, to mention the leading ones—private individuals have formed groups to help in the fight against racketeering (BW—Mar.8'52,p184). Already they have accomplished much in supplementing the work of official investigators. The New York City Anti-Crime Committee, headed by Spruille Braden, is outstanding in this respect. It has been a prime factor in pushing the case against criminals on the waterfront.

How the Racketeers Operate

Perhaps the most striking thing about racketeering in the Port of New York is the fact that it is so closely tied up with the International Longshoremen's Assn., an AFL branch which organizes the men on the piers. Any union is dependent on its leaders, and when criminals gain control of a union they can use it for their own ends. This is what has happened on the New York piers.

Many of the bosses in ILA are racketeers—some with long criminal records. These men decide the composition of the work-gangs, often select stevedores who are willing to pay a kickback from their wages. So the work-

ers are victimized to begin with.

At the same time, the bosses can put the squeeze on businessmen in the port by threatening to call a strike when any company refuses to meet their demands. In one case a couple of racketeers extorted \$100 for every

ship unloaded, by using the strike threat.

Besides paying extortion to criminals, New York businessmen are facing the danger that shipping companies will move elsewhere to find port facilities that are not racketeer-ridden. Racketeering is therefore not something that New York can take in its stride, for the city's economic prosperity is due in no small measure to its shipping activity.

The Anti-Crime Committee took this unsavory situation as one of its targets. Spruille Braden and his associates worked unostentatiously, gathering facts, sifting evidence, helping the authorities piece together a case for the courts. Their work has borne fruit in the indictment of a number of waterfront characters, including two ILA officials.

Derelict Management

The unfortunate fact, however, is that not all businessmen are anxious, or even willing, to cooperate. One reason is fear of the consequences—fear that the waterfront bosses will take their revenge on anyone who informs on them.

Too many owners are therefore reluctant to come forward with the information needed for legal action against racketeers. This attitude has been criticized both by public officials and by Spruille Braden speaking for his private group. It means that such owners become partners, willingly or otherwise, with the men who are preving on them.

The duty of reputable businessmen is plain. They should aid their own people who are working for the good of the nation as well as for the safety of business; they should report every attempt at extortion; they should lay before the Anti-Crime Committee every scrap of information that can help to break the stranglehold.

The investigation of the New York waterfront is a portent of things to come. The fight against crime is and must be nationwide. Businessmen, like other Americans, should refuse to remain satisfied with anything less than a nationwide victory.

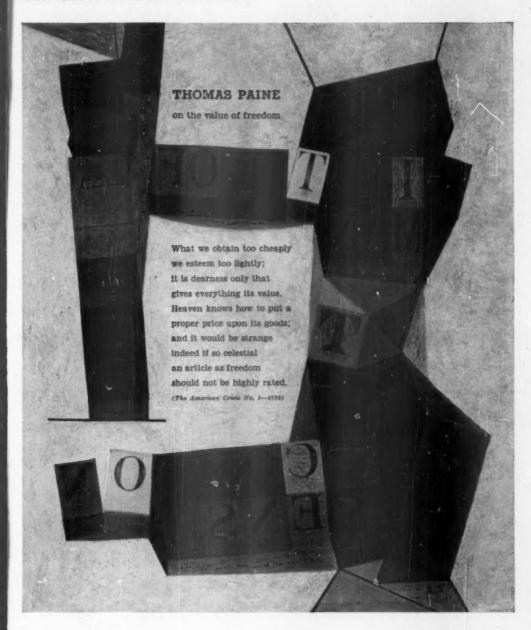
BUSINESS WEEK has urged management to support the Anti-Crime Committees in the past. We repeat this exhortation now, in the knowledge that the New York Committee has already achieved notable success. Business should not lose this opportunity to strike at one of the country's worst enemies—the racketeer.

The End of Utopia

The Congressional Quarterly for Nov. 21, 1952, informs us that Armstrong County, S. D., no longer exists as a political entity. It has been annexed by neighboring Dewey County, whose voters decided to make the grab.

Armstrong County had only 52 inhabitants when the census was taken in 1950. It was an old-fashioned farming area, among the richest in South Dakota. It had few modern improvements, Indian trails instead of roads, and no local government. Its unorganized existence permitted it to bypass many of the problems that bedevil life elsewhere.

The Congressional Quarterly quotes one South Dakotan as commenting on the demise of Armstrong County: "That's progress for you. Armstrong had no public employees, no tax collectors, no roads to fight over, asked for nothing, and had the highest per capita wealth of any place in the state. Pure Utopia—and they voted it out."



CONTAINER CORPORATION OF AMERICA



Another new development using

B. F. Goodrich Chemical raw materials



CHRISTMAS GIFT that gives you something

PLASTIC modeling kits like this one are big sellers in toy departments and novelty stores - a profit-maker for the manufacturer who thought up the idea.

The plastic clay, based on Geon paste resin, is modeled by hand, then baked a few minutes in the kitchen oven to make it tough yet flexible. More than a toy, it's an application of a new idea in plastics! For this same process can be used in pattern work, jigs, tools, dies, negative and positive molds.

The versatility of Geon has a way of doing that-stimulating saleable ideas. Just think of the range of articles made from Geon-shower curtains and flooring, belts, dolls, electrical insulation-there seems to be no end to Geon's possibilities!

Supplied as resins, latices or compounded plastics, Geon materials make products resistant to heat and cold . . . water . . . weather . . . abrasion and most chemicals. They can be used for coating, casting, molding or dipping. Brilliant or delicate colors are possible. Start with those advantages, and you have a head start on developing or im-

proving a product to bring in more sales. For technical advice, write Dept. A-13, B. F. Goodrich Chemical Company, Rose Building, Cleveland 15, Ohio. Cable address: Goodchemco. In Canada: Kitchener, Ontario.



GEON RESINS • GOOD-RITÉ PLASTICIZERS . . . the ideal team to make products easier, better and more saleable

GEON polyvinyl materials • HYCAR American rubber • GOOD-RITE chemicals and plasticizers • HARMON organic colors